

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF INDIANA  
INDIANAPOLIS DIVISION  
CASE NO. 1:23-cv-00595-JPH-KMB

K.C., et al., )  
 )  
 Plaintiffs, )  
 )  
 -vs- )  
 )  
 THE INDIVIDUAL MEMBERS OF THE )  
 MEDICAL LICENSING BOARD OF )  
 INDIANA, in their official )  
 capacities, et al., )  
 )  
 Defendants. )

The videoconference deposition upon oral examination of JAMES M. CANTOR, PH.D., a witness produced and sworn before me, Dana S. Miller, RPR, CRR, a Notary Public in and for the County of Boone, State of Indiana, taken on behalf of the Plaintiffs, appearing remotely from Ontario, Canada, on the 7th day of June, 2023, commencing at 9:35 a.m. pursuant to the Federal Rules of Civil Procedure.

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	MODERATOR: Joel Scherer
	Circle City Reporting
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1 Pursuant to the Indiana Supreme Court Case 20S-MS-236  
2 signed March 31, 2020,  
3 J A M E S M. C A N T O R, PH.D., having been first  
4 duly sworn or affirmed to tell the truth, the whole truth  
5 and nothing but the truth relating to said  
6 matter, was examined and testified as follows:  
7 DIRECT EXAMINATION  
8 QUESTIONS BY CHASE STRANGIO:  
9 Q Good morning, Dr. Cantor. How are you today?  
10 A I'm good. Thank you.  
11 Q My name is Chase Strangio. I am a lawyer with the  
12 ACLU representing the plaintiffs in this case. And  
13 I'll be asking you some questions today.  
14 As I mentioned, there are also some law  
15 student interns sitting in, as well as my  
16 colleagues, Gavin Rose and Stevie Pactor, from the  
17 ACLU of Indiana.  
18 Can you start by just stating your full name  
19 for the record, please.  
20 A I'm Dr. James Michael Cantor, C-A-N-T-O-R.  
21 Q And you've had your deposition taken before; yes?  
22 A Yes, I have.  
23 Q So you, generally speaking, know how this process  
24 goes?  
25 A Yes, I do.

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1 Q Okay. Still going to run through a few of the  
2 ground rules just to make sure we're on the same  
3 page.  
4 So as you know, there's a court reporter here.  
5 When answering my question, I ask that you respond  
6 verbally out loud so that Dana can hear you. And  
7 to please wait for me to finish asking my question  
8 before you begin your response. Does that sound  
9 okay?  
10 A Yep.  
11 Q And if you don't understand my question, which is  
12 very possible, please let me know and I can try to  
13 word it differently. Is that okay?  
14 A Yep.  
15 Q And if you do answer my question, I will assume  
16 that you understood it. Does that make sense?  
17 A I understand, yep.  
18 Q And are you feeling okay today?  
19 A Yes, I am. Thank you.  
20 Q Okay. And are you on any medication that would  
21 impair your ability to truthfully and accurately  
22 answer my questions?  
23 A No, I am not.  
24 Q And is there any reason you don't feel able to give  
25 complete and truthful testimony today?

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1 A Nope.  
2 Q Okay. Great. I think we can get started. And, as  
3 you know, at any point if you need to take a break,  
4 please let me know. I imagine we'll also break for  
5 lunch at some point. But if -- the only thing I  
6 ask is to just answer the question we're discussing  
7 before we break.  
8 A I understand.  
9 Q All right. So just starting with a little  
10 background. You have been retained by the  
11 defendants as an expert in this case; is that  
12 right?  
13 A Yes, I have.  
14 Q And how did you come to be retained as an expert in  
15 this case?  
16 A Oh, goodness. I'm involved in several very similar  
17 cases. And it's difficult for me to remember  
18 exactly which one -- which way I got what e-mail  
19 from who for which case.  
20 So I could speak in general, I don't -- as I  
21 say, I don't remember exactly how the first e-mail  
22 started, "Hi, Dr. Cantor, I was referred to you  
23 from," but it was essentially along those lines.  
24 Q So someone in the State of -- someone at the State  
25 of Indiana Attorney General's Office contacted you

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1 and you didn't contact them; is that right?  
2 A Yes, that's correct.  
3 Q And do you remember who that was?  
4 A As I say, because several of these offices often  
5 involve, you know, several different people, I  
6 can't remember exactly which e-mail came from which  
7 without going through my own e-mails to see who  
8 said -- who came in at what point in the  
9 conversation.  
10 Q And do you remember approximately when that was?  
11 A Within the past four or five months, I think.  
12 Again, as I say, there's a cluster of them. I'm  
13 not good on people's names to begin with.  
14 So I hesitate to, again, without checking  
15 through my own e-mails, but it was roughly in  
16 that -- within the past couple of months. But  
17 without checking my e-mails, I can't be --  
18 Q Understood.  
19 A I know better than to depend on my memory when  
20 there are several very similar things all standing  
21 next to each other.  
22 Q Understood. You said you were an expert in similar  
23 cases currently. What cases are those?  
24 A On my CV, I listed all of the current cases. The  
25 states themselves would be Kentucky, Indiana,

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1 Montana, Arizona, Florida, Texas, Tennessee. And,  
2 again, without checking my list, I'm very probably  
3 leaving one or two out.  
4 Q And Oklahoma?  
5 A Yes. Thank you.  
6 Q So that's in addition -- including -- excuse me.  
7 Including Indiana, that's one, two, three,  
8 four -- at least eight states currently in cases  
9 involving similar issues to the one here?  
10 A Yes, that sounds about right.  
11 Q And just so we're grounded in this case, are you  
12 aware that this case concerns an Indiana law called  
13 Senate Enrolled Act 480?  
14 A Yes, I am.  
15 Q And when this law was pending in the Indiana  
16 legislature, did you take a public position on the  
17 bill?  
18 A No. The only testimony I had, and the only  
19 interest I've ever had, really, is in the content  
20 of the science.  
21 So whenever I'm asked by the media, you know,  
22 representatives in any state or any country,  
23 members of the public, random e-mails I get, I'm  
24 always happy to share whatever I can about the  
25 science, but -- oh, and if somebody asks me a

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1 particular opinion about it, I'm perfectly happy to  
2 show, you know, whatever points -- where the  
3 science seems to contradict or match up with any  
4 given proposal.  
5 But I haven't in this state, and I don't think  
6 in any state, given any particular support or  
7 detractor from any particular proposal. The only  
8 one I can think of where I did, I was specifically  
9 invited to come and appear in Ontario, none in the  
10 U.S.  
11 Q So did you testify in support of Senate Enrolled  
12 Act 480?  
13 A No, I did not.  
14 Q Have you ever spoken with a member of the Indiana  
15 legislature about Senate Enrolled Act 480?  
16 A No, I haven't.  
17 Q Did you speak with anyone about Senate Enrolled Act  
18 480 while it was pending?  
19 A Not in any kind of professional capacity. But with  
20 so many states and so many conversations just  
21 amongst my colleagues and friends, I can't say that  
22 I've never had a comment about it in general. But  
23 I've never taken any public stance or given any,  
24 you know, public commentary on any of the -- on any  
25 specific proposal.

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1 I tend very specifically -- I do my best very  
2 specifically to speak, again, just to the science  
3 and to the general ideas and what ideas in general  
4 match what -- or fail to match up with whatever  
5 point in the science.  
6 Q Understood. So have you -- other than the Ontario  
7 example, have you ever testified in any state  
8 legislature in the United States over pending  
9 legislation concerning transgender people or the  
10 treatment of gender dysphoria?  
11 A No, I have not.  
12 Q What did you do to prepare for your deposition  
13 today?  
14 A Lots and lots of re-reading. I re-read, of course,  
15 the case files that I had, my comments, my  
16 responses to the other experts who submitted  
17 declarations. Re-read my own CV in case those  
18 relevant questions are asked. And I'm always  
19 keeping up with the literature, so there's always  
20 something I need to read, re-read.  
21 Q You mentioned your case files. What are those?  
22 A Oh, no, I meant because I'm involved in several  
23 different of the legal cases, in order to help me,  
24 you know, as much as possible keep straight which  
25 one is which, pardon the pun, just keeping track of

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1 which ones are involving which subset of issues and  
2 in what order things are happening, just to, again,  
3 keep my -- help me, as best as my aging memory can,  
4 which one is which.  
5 Q So when you say your case files, you mean your  
6 files for this particular case?  
7 A Yes.  
8 Q And did you meet --  
9 A Well, I shouldn't say this particular case, but  
10 they're in clusters. And so, it helps me, you  
11 know, keep a cognitive map of what's going in which  
12 direction.  
13 But by case files, I don't mean patient cases.  
14 I mean the various set of legal cases and the  
15 various, you know, documentation that's available  
16 for each one. And some of the cases pertain to  
17 events that happened years ago and what was -- what  
18 the state of the science was at the particular time  
19 before.  
20 So, again, keeping track of a rough timeline  
21 of what was available to whom and when.  
22 Q So what is the cluster that this case would fall  
23 in?  
24 A Oh, bans to medicalized transition of minors. The  
25 other clusters are the athletics-related bills and

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1 a set of bills that I would describe more generally  
2 as free speech bills, under what circumstances, you  
3 know, what person has a -- that somebody's comments  
4 which others are offended by, you know, to what  
5 extent the actual content of their comments  
6 actually line up with what the science and what the  
7 evidence itself has. I would say roughly those  
8 three main clusters.  
9 Q So you --  
10 A Oh, and I should add -- I'm sorry --  
11 detransitioners. Now there are groups of  
12 detransitioners who are taking actions against  
13 their clinics and care providers.  
14 Q So you're currently serving as an expert in cases  
15 involving medical care, athletics, what you explain  
16 as free speech and detransition. Is that a fair  
17 summary?  
18 A Yes. My hesitation really is that my involvement  
19 in all of them is the same regardless of the  
20 application to which it's being put, the question  
21 is to me or I'm a scientist --  
22 Q Understood.  
23 A -- and, as I say I, I will tell anybody of any  
24 political angle or view whatever I can about the  
25 existing science. What we know, what we don't know

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1 and how to interpret science and the scientific  
2 method.  
3 So those are the clusters, the topics to which  
4 that information is being put. But the information  
5 from me is the same regardless of who and how it's  
6 being put.  
7 Q So just to simplify, you are offering your  
8 scientific opinion in cases involving medical care,  
9 athletics, free speech and detransition; is that  
10 right?  
11 A Yes. I'd say that's a fair way to put it, sure.  
12 Q And did you meet with counsel in preparation for  
13 today's deposition?  
14 A Yes, I did.  
15 Q How many times?  
16 A Once.  
17 Q And for how long?  
18 A A full day, a long day.  
19 Q So you met with counsel for one long day?  
20 A Yes. Everything else has been mostly  
21 organizational e-mails, a few short Zoom calls.  
22 But specifically aimed at preparation for today was  
23 one full day.  
24 Q What were the few short Zoom calls?  
25 A Oh, again, reviewing the documents that have been

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1 submitted, you know, the basic process, the  
2 context.  
3 Q Yes, I would only -- so I didn't know if you  
4 meant -- is that part of your meeting with counsel,  
5 or is that a separate part of your preparation? I  
6 don't need to know what you did with counsel.  
7 A Oh, yeah, the e-mails and Zoom calls were  
8 background kinds of organization. The only  
9 preparation specifically for today was the one full  
10 day pre-prep -- or prep.  
11 Q And who was present for that prep meeting?  
12 A John Ramer and Roger Brooks.  
13 Q Roger Brooks from ADF?  
14 A Correct.  
15 Q Is ADF involved in this case?  
16 A I don't know the details of the arrangements, but  
17 the sequence of events was the first substantive  
18 case that I was involved in for which I was  
19 preparing a sizeable review of the scientific  
20 literature was a case in Alabama.  
21 After that preliminary hearing -- preliminary  
22 injunction hearing, Alabama, the state, then again  
23 I want to use the word retained, but I don't know  
24 if that's actually the proper arrangement, but they  
25 then began to -- they took on Roger Brooks in order

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1 to help them coordinate the subsequent features --  
2 not features, events, processing of that case --  
3 Q Does Roger --  
4 A -- and --  
5 Q Sorry. Go ahead. You can continue.  
6 A Then several other states, as I say, with very,  
7 very similar cases going on, same questions, same  
8 needs, also wanted to retain me.  
9 They similarly began to coordinate with  
10 Alabama in order to, you know, minimize, overlap,  
11 you know, maximize the efficiency between each of  
12 the cases. They signed common interest agreements  
13 with each other.  
14 So Roger then, in turn, became involved in  
15 helping to coordinate, you know, these -- they're  
16 not coordinated cases in any way that I'm aware of,  
17 but in order to help, you know, streamline  
18 everything, there is an amount of, you know, trying  
19 to use the best resources available across each of  
20 these various states and each of the people  
21 available to them.  
22 MR. RAMER: Yeah, and --  
23 A All of that to say I'm not aware of a direct  
24 relationship between Roger Brooks and Indiana, but  
25 through this set of coordinations, he is therefore,

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1 you know, at least indirectly involved because of  
2 his experience through all of it. You know, many  
3 people take his input and advice, you know, very  
4 seriously.  
5 MR. RAMER: Yeah, sorry, I'll just -- I'm  
6 going to object and instruct the witness not to  
7 answer about the substance of conversations,  
8 obviously, with me as counsel in Indiana and Roger  
9 Brooks who is counsel in Alabama, subject to the  
10 protections there and also the common interest  
11 privilege and protections here, so --  
12 MR. STRANGIO: Yes, understood. Not trying in  
13 any way to get at the substance of what was talked  
14 about, just who was there.  
15 MR. RAMER: Right.  
16 BY MR. STRANGIO:  
17 Q Is Roger Brooks often present for your deposition  
18 preps subsequent to your involvement in Alabama?  
19 A This was the only one. And he wasn't involved in  
20 the prep for Alabama. He became involved after the  
21 preliminary injunction hearing.  
22 Q Got it. Do you have a relationship with ADF?  
23 A No.  
24 Q Did you speak with anyone other than your counsel  
25 and Roger Brooks about your testimony today?

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1 A Not other than in any logistical sense.  
2 Q What do you mean by logistical sense?  
3 A Making sure that I had a quiet place in order to  
4 be, clearing out my calendar for the day. You  
5 know, just old-fashioned logistical kind of, oh,  
6 this is happening.  
7 Q Understood. And you talked about reviewing case  
8 documents and your report and the other expert  
9 reports in this case.  
10 Any other documents that you recall reviewing  
11 in anticipation of today's deposition?  
12 A Not specific documents, no.  
13 Q Okay. And is there anything with you on your desk  
14 in front of you at the moment?  
15 A I cleared my desk. I gave myself a blank pad of  
16 paper in case I need it, a clean copy of my report  
17 itself. But I didn't have time to print out a copy  
18 of my CV in case there was something I needed in  
19 reference to that. Other than that, it's coffee  
20 and water.  
21 Q Understood. Okay. So the only printed document is  
22 your clean copy of your report in this case. So  
23 when we talk about that, you will have it in front  
24 of you; is that correct?  
25 A Exactly, yes.

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1 Q Great. Thank you for doing that, spare us some of  
2 the difficulties of the electronics.  
3 A I don't know even if Lieutenant Uhura could have  
4 handled this much paper.  
5 Q All right. Well, we will just jump right in, then.  
6 So I want to start by just marking a few exhibits,  
7 just for ease as we go along, starting with your  
8 declaration in this case.  
9 MR. STRANGIO: So, Joel, if you can go ahead  
10 and pull up what's premarked as Exhibit 1, that  
11 would be great.  
12 BY MR. STRANGIO:  
13 Q And that's what, Dr. Cantor, you have in front of  
14 you, I gather.  
15 Doctor, do you -- oh, wow, maybe I can  
16 actually move this -- do you recognize this  
17 document, Doctor?  
18 A Yes, I do. It looks like the declaration submitted  
19 for this case.  
20 Q And you understand this to be a true and accurate  
21 copy of the declaration that you submitted in this  
22 case?  
23 A As best I can see, yes.  
24 Q I can go down to the list of appendices, the  
25 bibliography. So, yes, it does appear to be that?

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1 A As best as I can tell, yes.  
2 Q And who wrote this declaration?  
3 A I did.  
4 Q Anyone help you?  
5 A No. Again, the legal team, you know, did some  
6 proofreading, gave me heads-up with some formatting  
7 issues. The American Foreign Law Association uses  
8 a different bibliography method than I'm accustomed  
9 to. In my profession, we use the APA standards.  
10 So, as I said, you know, technical details  
11 like that.  
12 Q And did you discuss this declaration with anyone?  
13 A Again, with the legal team to help ensure the  
14 topics that needed coverage would be included.  
15 Q Anyone else?  
16 A Not specifically that I can recall. As I say,  
17 because I'm involved in several cases, and the  
18 science that they need input on is the same  
19 science, using the same basic report updated, you  
20 know, as necessary, and, again, with feedback from  
21 the various groups in order -- various parties to  
22 make sure -- sometimes just a clarification of a  
23 sentence or to ensure that it includes the  
24 information that they need it to include.  
25 So I don't want to say blanketly that nobody

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1 else has, you know, had any input to it, but  
2 everybody who has had input, it's been on that same  
3 kind of basic back-and-forth, make sure it's clear.  
4 And what I can only describe as formatting things  
5 in the opposite way than we do in science.  
6 In science, I'm accustomed to here's what we  
7 know. Here's the project I did, and here are our  
8 conclusions. Where legal documents tend to be  
9 organized in the opposite order. Here is my  
10 conclusion, then I'll get to subsequently the  
11 backup for how I got there.  
12 Q Other than the various legal teams involved in all  
13 of the cases where you're currently serving as an  
14 expert, did you discuss the contents of this with  
15 anyone else?  
16 A Outside of that, no, not that I recall.  
17 Q And did you discuss the contents of your  
18 declaration with the other experts retained by the  
19 defendants in this case?  
20 A No, I did not.  
21 Q Does this declaration represent a complete  
22 statement of the opinions you intend to provide in  
23 this matter?  
24 A Yes, it does, which isn't to say, you know, if  
25 asked a question about something else in the

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1 research that I happened not to have covered in my  
2 report, or if somebody presents an argument making  
3 an error in scientific thinking, you know, other  
4 information can become relevant. But this is -- it  
5 summarizes my intention of everything I plan to be  
6 able -- I plan to be expressing.  
7 Q So up until -- up to the point of today, this  
8 represents a complete statement of the opinions you  
9 intend to provide?  
10 A Yes, that is correct.  
11 Q Are you aware of any inaccuracies in the  
12 declaration that you submitted in this case?  
13 A No, other than, as I say, I found missing half of a  
14 pair of parentheses, because the editor in me.  
15 Again, as soon as I submit something, that's  
16 exactly when I find a typo.  
17 Q Yes, I understand this. Anything you would --  
18 other than the parentheses, anything you would like  
19 to amend or correct in the declaration you  
20 submitted in this case?  
21 A No. I found no factual or content error.  
22 MR. STRANGIO: And let's go ahead, Joel, and  
23 pull up what's premarked as Exhibit 2.  
24 BY MR. STRANGIO:  
25 Q And just for your awareness, Doctor, this is going

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1 to be your CV. Do you recognize this document?

2 A Yes, I do. It looks like my CV.

3 Q And is this a current and complete version of your

4 CV, 32 pages?

5 A The only -- and there's -- yes, it's complete, with

6 the caveat that I would have updated it with any

7 additional cases that I've become involved with.

8 Q So the only thing that might be missing from this

9 would be the addition of cases in which you've

10 become involved as an expert witness; is that

11 right?

12 A Yes, to the best of my recollection. I don't think

13 there's been anything else that's changed since I

14 submitted it.

15 Q So in 2022, you testified at a hearing in Alabama

16 in a case concerning a law similar to SEA 480; is

17 that right?

18 A Yes, that is correct.

19 MR. STRANGIO: And let's, Joel, go ahead and

20 pull up what's premarked as Exhibit 3.

21 BY MR. STRANGIO:

22 Q And, Dr. Cantor, at the time this was the case

23 called Eknes-Tucker; is that correct?

24 A Yes, that's my memory of it.

25 Q Doctor, does this appear to be a copy of your

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1 testimony from that hearing? You can take a close

2 look.

3 A As best as I can tell, that's what it looks like.

4 The sentences that jump out at me match the --

5 match what I recall.

6 Q And did you testify truthfully in that hearing?

7 A Yes, I did.

8 Q Great. So that's all I have to premark for now.

9 So let's go back to your CV, which is Exhibit 2.

10 MR. STRANGIO: If you could, Joel. Thanks.

11 BY MR. STRANGIO:

12 Q And before we have that in front of us, in

13 paragraph 1 of your declaration in this case, you

14 describe yourself as a sexual behavior scientist.

15 What is that?

16 A That's a good question. It is a relatively small

17 field in numbers of people. Because of the import

18 of the issues to so many people in so many

19 circumstances, it is like a very, very highly

20 followed field.

21 I say that only because there isn't a very

22 simple universally-agreed-upon term, like if I said

23 I were an epidemiologist or endocrinologist or

24 something, very many of us would simply refer to

25 ourselves as sex researchers. But because sex

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1 research is itself such a highly interdisciplinary

2 field, saying one is a sex researcher describes the

3 questions that we're pursuing and the kind of

4 issues we're investigating, but within that one

5 could be anything from a psychologist to a

6 neuroscientist, an epidemiologist. It doesn't

7 refer to the academic field referring to the tools

8 that we use in order to address those questions.

9 So I usually would use a phrase like sex

10 researcher or sexual behavior scientist in order to

11 indicate the kind of questions in which I've spent

12 my career investigating.

13 Q And when you say sex researcher, what are you

14 referring to with respect to sex?

15 A Well, over the course of my career, I've handled,

16 you know, many, many different kinds of questions.

17 In general, because I have a more technical

18 background than most other sex researchers do, I've

19 been able to apply, you know, much more

20 sophisticated tools for doing those investigations.

21 For example, a lot of studies including, you

22 know, many of the studies that the public are most

23 aware of, really involve interviewing people or

24 surveys or questionnaires or other relatively

25 simple, relatively straightforward methods, but

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1 they don't answer questions in the kind of way that

2 have a great deal of weight.

3 For example, you know, is somebody born gay,

4 or does somebody, you know, become gay is a

5 question that very often comes down to, you know,

6 some very technical, very biological studies. But

7 because so many people who themselves call

8 themselves sex researchers are just interviewing

9 people, they just get a pile of what everybody

10 thinks the answer should be.

11 So as I say, when I use the term, I'm refer --

12 when I use the term to describe myself, I'm

13 refer -- using sexual behavior scientist because

14 I'm investigating, you know, the motivations and

15 the basis behind or supporting people's sexual

16 behaviors, but I don't want to limit it technically

17 to behaviors either.

18 For example, if there's somebody who's

19 uncomfortable or trying to deal with being gay

20 living in a straight world, you know, some of the

21 questions are, "Doc, why am I different from other

22 people?" Well, we're not talking about his

23 behavior. We're not talking about some -- yeah,

24 doing therapy with somebody in order to help them,

25 you know, gain the self-confidence that they need

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1 in order to live a happy gay life.  
2 But for the research itself, again, now we're  
3 talking more, you know, fundamental -- I don't know  
4 if I want to say traditional kinds of science, but  
5 we're applying the tools to sexual behaviors or  
6 sexual desires, sexual experiences, sexual intents,  
7 sexual fantasies, masturbatory fantasies.  
8 Some of these, you know, are not visible  
9 behaviors, although they, you know -- some of these  
10 don't reflect external behaviors. They reflect,  
11 you know, what we infer to be internal states. And  
12 there is no one-to-one correspondence between  
13 external observable, objective characteristics and  
14 what people report being their internal  
15 experiences. That's especially true for people  
16 whose sexual interests are, you know, something  
17 that's stigmatized. They hide it, feel like they  
18 need to hide it. They hide it in different ways  
19 from different people in different circumstances,  
20 including to the themselves.  
21 Q And what is your current job?  
22 A I'm in private practice.  
23 Q What kind of private practice?  
24 A It's in clinical psychology as a clinical  
25 psychologist. My hesitation is, of course, as

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1 these cases became, you know, more and more  
2 frequent, it's now a larger and larger proportion  
3 of my time.  
4 The majority of my career, as my CV says, is  
5 as a full-time scientist and member of the medical  
6 faculty. When I left CAMH, it was to go into  
7 private practice. And then as these various cases,  
8 again, came to -- started coming up, I was devoting  
9 more and more time to the cases.  
10 So I'm in private practice and continue to see  
11 patients, but a larger portion of my time, again,  
12 is in consultation, expert witness testimony, and  
13 in summarizing the existing science for the needs  
14 of the various cases.  
15 Q So let's take each piece separately. What  
16 percentage of your time currently would you say is  
17 occupied by your private practice?  
18 A I guess my question is a little bit different if  
19 we're talking about corporate structure versus  
20 hours per week.  
21 So far as the accountants are concerned, you  
22 know, everything I do is part of my private  
23 practice. If one means by private practice, you  
24 know, one-to-one therapy and seeing patients in a  
25 traditional clinical psychology kind of role --

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1 Q Yeah, that's --  
2 A -- or used in a therapy kind of role --  
3 Q What percentage of your week is spent seeing  
4 patients as a clinical psychologist?  
5 A Roughly 20 percent of my time.  
6 Q And what percentage of your time is spent serving  
7 as an expert witness?  
8 A Roughly 80 percent, two-thirds of my time.  
9 Q And are you regularly compensated \$400 an hour for  
10 your expert witness time?  
11 A I am now, yes.  
12 Q And approximately how many hours per week do you  
13 spend serving as an expert witness?  
14 A Oh, goodness. It's really hard to nail that down.  
15 Although I'm now doing it, I'll say,  
16 professionally, I'm still a scientist at heart. My  
17 thinking is still what my thinking always is, I  
18 want to know the right answer. I'm just genuinely  
19 curious, and I want to know how all of this stuff  
20 works.  
21 So I will, for example, be posed a question  
22 which, you know, whatever lawyer has about whatever  
23 particular person's situation or case. I'll spend  
24 whatever, half an hour answering an e-mail or  
25 supplying whatever materials back up whatever the

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1 answer to their question is, but that then leads  
2 to, oh, wait a -- that leads me to start thinking  
3 about if that's true, wouldn't that mean. And now  
4 I'm reorganizing my own notes, and I'm, you know,  
5 reading and catching up on, you know, some obscure  
6 statistic that was used in whatever set of  
7 analyses.  
8 And I'm, you know, now spending several  
9 hours -- I don't know if self-educating is exactly  
10 the right term, but scratching the itch of my own  
11 curiosity for which, you know, I became a scientist  
12 in the first place. And then later in the week I  
13 will get another e-mail from another person in an  
14 unrelated case asking a similar question, and I can  
15 now give them a more fulsome answer.  
16 So I still only, you know, spent a limited  
17 amount of time working with either particular case,  
18 but I will have spent several hours, you know,  
19 investigating, thinking about and forming my own  
20 thoughts about whatever a given issue is.  
21 Q So understanding that it's combined somewhat across  
22 cases, how many hours, approximately, per week  
23 would you say you spend serving as an expert  
24 witness?  
25 A Typically, over the past few months, perhaps the

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1 past year, actually, might be a better guideline,  
2 over the past year anywhere from just two or three  
3 hours in bookkeeping and miscellaneous, you know,  
4 admin tasks up through full-time, up through 40ish  
5 hours, as an average, 10 to 15.  
6 But, again, with the caveat that it runs  
7 anywhere from practically zero for a long period of  
8 time to, you know, almost obsessive because the --  
9 some deadline is approaching with very little  
10 notice, or I got caught up with, you know, my own  
11 curiosity just leading me to that much more reading  
12 and thinking.  
13 Q Understood. And so, you said for the past year it  
14 could range from anywhere between zero, two to  
15 three hours, up to full-time. Did I get that  
16 right?  
17 A Yes, that would be about right.  
18 Q And over the past year, about how much of your  
19 income would you say derived from serving as an  
20 expert witness?  
21 MR. RAMER: Objection to the form.  
22 A So if I'm remembering today's process correctly, I  
23 do still answer a question even though there's an  
24 objection in a deposition, even though --  
25 Q Yes, sorry. Yes.

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1 A Got it. I'm just checking. Roughly 80 percent.  
2 Q And on your CV, you're listed as the Director of  
3 the Toronto Sexuality Centre from 2017 through the  
4 present.  
5 What is that position?  
6 A When I left my hospital appointment, as I say it  
7 was to go into private practice. My intent was to  
8 begin a sex therapy clinic, which I did with  
9 several staff people, you know, also clinical  
10 psychologists, when I incorporated that group and I  
11 began that clinic, I named it the Toronto Sexuality  
12 Centre. And the legal designations appear just  
13 automatically titled me, therefore, as Director.  
14 As time went on and it became apparent -- a  
15 bit clearer that a more substantial amount of my  
16 own time was going to be involved with legal cases  
17 rather than with clinical situations, I rebalanced  
18 what was going on in the clinic so that I am  
19 essentially just a solo private practitioner, but I  
20 still have the name of the clinic as the corporate  
21 entity.  
22 Q So the Toronto Sexuality Centre signifies your  
23 private practice; is that right?  
24 A Yes. That's an accurate summary, yes.  
25 Q And when you say you left your hospital appointment

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1 to begin your private practice, when was that?  
2 A In 2017.  
3 Q And before 2017, what was your job?  
4 A I was a senior scientist at one of the large  
5 psychiatric teaching hospitals -- well, the largest  
6 psychiatric teaching hospital up here in Canada, in  
7 Toronto, called the Centre for -- now called The  
8 Centre for Addiction and Mental Health.  
9 Q And when you were at the -- when you were a senior  
10 scientist at that centre prior to 2017, did you  
11 have a clinical practice?  
12 A No, other than in the last year of it, as I was  
13 preparing to leave it, I was, you know, building  
14 my -- I was sewing together my parachute before I  
15 jumped.  
16 Q And in that role as a senior scientist at The  
17 Centre for Addiction and Mental Health, what were  
18 your responsibilities?  
19 A They changed over the course of time. And as my  
20 career advanced with them -- again, also as my CV  
21 indicates, I began there as an intern the final  
22 year of my doctoral studies, then a postdoctoral  
23 fellow and so on progressing up the pretty  
24 traditional ladder for academic researchers.  
25 My duties as a senior scientist then were I

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1 was in charge of my specific research projects. I  
2 was in charge of -- including obtaining the funding  
3 in order to, you know, pursue those projects  
4 itself.  
5 I was then training and supervising the next  
6 line of junior scientists, plus my own students  
7 engaged in academic publications for the various  
8 studies that I was running. And, also, in its  
9 eccentric way as an ambassador to the field itself,  
10 I was one of the higher profiled scientists in that  
11 institution, largely due to my own, you know,  
12 success and standing within my own field.  
13 And because the issues that I was studying are  
14 not just attention grabbing, but of the size of  
15 legal weight or size of social import where the  
16 results were not mere scientific curiosities, they  
17 had very, very obvious and very, very important  
18 potential implications for public health and public  
19 safety.  
20 So my media -- social media, and as I say  
21 almost ambassadorial role itself became a large --  
22 I don't know if I should call it official or  
23 unofficial portion of my career, of my work --  
24 Q When -- sorry. Continue.  
25 A Of my career there.

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1 Q And when you say ambassador to the field, what  
2 field is that that you're describing?  
3 A Sex research, several different fields. Again,  
4 that's the nature of being part of an interdis--  
5 such an interdisciplinary field.  
6 Part of it was to sex research itself. Part  
7 of it was to the field of psychiatry. Even though  
8 I was not myself a psychiatrist, I was, you know, a  
9 member of the faculty of the Department of  
10 Psychiatry in the University of Toronto Medical  
11 School.  
12 So helping the public appreciate the role of  
13 mental health, mental health research, psychiatry  
14 within the public health system, and to help people  
15 appreciate the potential benefits of scientifically  
16 oriented, evidence-based mental health treatment.  
17 So a chunk, as I say, was to psychiatry. A  
18 chunk was to sex research. And a large chunk, as I  
19 say, to public welfare and public safety. I was  
20 specifically within the law and mental health  
21 program of the -- the abbreviation to the  
22 hospital -- again, it was the Center for Addiction  
23 and Mental Health, or C-A-M-H, it's pronounceable  
24 nickname is CAMH.  
25 Q CAMH. Understood.

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1 A So --  
2 Q How -- sorry. Continue, you can.  
3 A Lost the train -- oh, so because my specific role  
4 was within their law and mental health program, a  
5 lot of -- a large chunk of the group for which I  
6 was -- you know, had an ambassadorial role was the  
7 integration of psychiatry and the law or mental  
8 health and the law.  
9 What are the appropriate ways, what are the  
10 most effective ways, what are the most  
11 evidenced-based ways to ensure that people who were  
12 engaged in the legal system in various capacities,  
13 how does mental health interact with that.  
14 So mental health issues not just in consent --  
15 capacity to consent, but also people who break the  
16 law. People who break the law, you know, during a  
17 psychotic episode or people who break the law, you  
18 know, as motivated by some mental illness. And  
19 what's the correct way to get the right resources  
20 to the right person, not only to help the patient,  
21 but to also protect the health and safety of the  
22 people around the patient.  
23 Q Understood. I think that's probably a good  
24 description of the field and your ambassadorial  
25 role.

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1 Going back to your clinical practice, your  
2 current clinical practice. What is the average age  
3 of the patients that you see?  
4 A I don't think -- as we would say in statistics,  
5 nothing can mislead as much as the mean group,  
6 because you really need to know how dispersed they  
7 are. If I calculated a number, it would be --  
8 Q Do you primarily see adults in your clinical  
9 practice?  
10 A Yes.  
11 Q Do you see any adolescents in your clinical  
12 practice?  
13 A Yes.  
14 Q How many?  
15 A Oh, goodness. Today I think it's just down to two.  
16 As I say, I see very few people of any age, you  
17 know, currently.  
18 Q Got it. And so you see about two adolescents. And  
19 how many adults?  
20 A Roughly eight currently.  
21 Q And any prepubertal children?  
22 A No.  
23 Q Has the -- oh, sorry, no. Just one more thing on  
24 your CV here. You have psychologist 2004 --  
25 May 2004 to December 2011.

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1 Were you a clinical psychologist during that  
2 period?  
3 A Yes, that's correct. But the term clinical  
4 psychologist isn't part of the formal title that  
5 the institution gave.  
6 Q Did you see patients during that period?  
7 A Yes, I did.  
8 Q And were the majority of your patients during that  
9 period adults?  
10 A Yes, they were.  
11 Q Any adolescents?  
12 A Yes.  
13 Q What percentage of your patients during that period  
14 were adolescent, would you say?  
15 A Roughly 5 percent, perhaps.  
16 Q And has the entirety of your professional career as  
17 a psychologist been in Canada?  
18 A Predominantly in Canada. I would hesitate to say  
19 all. The gray part of the line would be I was  
20 still in the U.S. while doing my master's degree.  
21 And I was employed as a research assistant  
22 specifically in neuroscience and in neuropsychology  
23 for several years.  
24 The topics were -- had no direct relationship  
25 with the topics I study now, but it, of course,

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1 involved the same kinds of tools that are how to  
2 assess somebody's brain health, neuropsychological  
3 functioning, right down to the brain anatomy  
4 itself.  
5 So the tools include several of the tools I  
6 still use today, but the topics and the behavioral  
7 syndromes that the people were exhibiting are  
8 different from the ones I study now. So I --  
9 Q Have you had -- sorry. Go ahead, you can finish.  
10 A So I was employed especially in a research context  
11 within psychology for a few years in the U.S.  
12 before I became Canadian.  
13 Q Any clinical practice in the United States?  
14 A Again, these overlap. The functions I was doing  
15 then was to help analyze on the research end  
16 information we were gathering from psychological  
17 and neuropsychological assessment and clinical  
18 assessment.  
19 So it was clinical research, whether one  
20 counts that as research or clinical reasonably and  
21 appropriately checks both boxes. You can't do  
22 research -- the kind of research we were doing was  
23 based on the clinical work that we were doing. So  
24 the same task is legitimately described as both.  
25 Q And was that between 1990 and 1992?

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1 A Yes, that is correct.  
2 Q And going back to your clinical psychology practice  
3 or work from May of 2004 to December of 2011, you  
4 said about 5 percent of your practice was  
5 adolescent patients. Any prepubertal children?  
6 A No.  
7 Q You're not a medical doctor; correct?  
8 A That is correct.  
9 Q Not a psychiatrist?  
10 A That is correct.  
11 Q Not an endocrinologist?  
12 A That is correct.  
13 Q Have you ever prescribed puberty blockers to any  
14 individual?  
15 A No, I have not.  
16 Q Hormone therapy?  
17 A No, I have not. I'm wondering -- I guess I have a  
18 question about your question.  
19 How are you using hormone therapy to be  
20 different from a specific hormone? To me those  
21 are -- one is the subset of the other.  
22 Q Well, do you prescribe medications?  
23 A No, I do not.  
24 Q So you've never prescribed puberty blockers to any  
25 individual?

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1 A That is correct.  
2 Q And you have never provided gender-affirming  
3 hormone therapy to any individuals?  
4 A That is correct.  
5 Q Do you have any formal education or training  
6 related to the treatment of gender dysphoria?  
7 A Yes. The Canadian training model is different from  
8 the American training model, however. So it's  
9 difficult to compare them one to one.  
10 Also, it's not -- clear is not the right  
11 word -- to the extent that people who say that  
12 they're offering training models, it's not clear,  
13 and I don't want to take for granted that they are  
14 legitimate training models.  
15 They are usually a list of information, people  
16 give it a title every -- and people in different  
17 circumstances or context will accept it as that,  
18 but these are not the kind of established,  
19 validated testing programs where anybody's, you  
20 know, tried to see what kind of outcomes and what  
21 the appropriate content of such programs are.  
22 But to get to your question more specifically,  
23 the training model used up here in Canada is much  
24 more similar to the European models than to the  
25 American models. Where the American models, as I

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1 say, are, you know, here's a folder with a correct,  
2 you know, title and description to it, and here's  
3 the test at the end, that's that, we now call you  
4 qualified, Canadian and European models apply a  
5 much more apprenticeship-oriented model where here  
6 are the readings, here are the patients. Let's go  
7 over it all and start talking about it all and  
8 develop a more comprehensive way of integrating all  
9 of the information, acknowledging all of the  
10 unknowns that we have.  
11 So, as I say, in Canada we don't have the kind  
12 of -- I don't know if credential-oriented is the  
13 right description, but, you know, on-paper method  
14 which is much more of the American model.  
15 Q Well, when --  
16 A I think there's also --  
17 Q When did you have the Canadian model of formal  
18 training related to gender dysphoria?  
19 A I would divide that into two pieces, a clinical  
20 portion and the research portion.  
21 Q And when was the clinical portion?  
22 A It was during my internship here. The final year  
23 of my training as a clinical psychologist.  
24 Q And what year was that?  
25 A Oh goodness.

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1 Q I can look on your --  
2 A '98/'99, I think it was.  
3 Q And when was your research module of training?  
4 A Again, it's hard to nail it down within those  
5 terms, because it doesn't fit that kind of a model  
6 quite -- it doesn't fit that way of thinking about  
7 how the training works.  
8 It's not like a plumbing or Calculus 1 where,  
9 you know, it's a pretty set, known, widely used set  
10 of material where people know what you get in  
11 Calculus 1.  
12 A great deal of the relevant research,  
13 research methods would have been over the course of  
14 my postdoctoral study -- over the course of my  
15 postdoctoral studies, which would have been, you  
16 know, in the first few years of 2000.  
17 But, again, these -- because of the nature of  
18 the model up here, because of the particular places  
19 and people that I was training with, there's much  
20 more of a blend across clinical and research.  
21 I was in a research science facility in a  
22 clinical research program where the difference  
23 between clinical work and research is just how good  
24 your documentation is. If you see a bunch of  
25 people and have a rough memory, and you're only

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1 reflecting on your own recollections of it, you  
2 know, calling it clinical experience or anecdotal  
3 evidence, people would accept that as clinical  
4 work.  
5 But if you then write down exactly how many  
6 people you saw, exactly how many people ended up  
7 with exactly what kind of situation, and you do it  
8 in a systematic way, now it's research, even though  
9 the functions themselves are the same.  
10 Q So taking aside the how, this blended process,  
11 let's say, occurred between 1998 and the early  
12 2000s; is that right?  
13 A It's correct for timeline. But, again, I don't  
14 mean to be evasive, but to leave enough, you know,  
15 blurriness around the boundaries that there was no  
16 end of -- as of June, you are now qualified or you  
17 are no longer going to be doing any of this after  
18 this semester, none of it was that kind of a  
19 program.  
20 Most training, as I say, is much more an  
21 apprentice kind of model where, "Oh, you're good at  
22 math. Could you give us a hand with" whoever it is  
23 doing whatever kind of a study. And so, now we're  
24 studying this kind of sexual or gender behavior  
25 instead of that kind of sexual or gender behavior.

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1 MR. STRANGIO: I'm about to sort of move into  
2 a slightly different section of the CV. Do you  
3 want to take a break, John, for five or --  
4 MR. RAMER: I'd welcome a break, but it's up  
5 to Dr. Cantor, if he would welcome one.  
6 THE WITNESS: Oh, more specifically, my  
7 coffee's empty. So yes.  
8 MR. STRANGIO: Okay. Let's do five minutes  
9 and we'll come back in five. Thanks.  
10 (A recess was taken.)  
11 BY MR. STRANGIO:  
12 Q On your website, Doctor, you describe the main  
13 focus of your research as being on the role of the  
14 brain and human sexual interests, especially  
15 atypical sexualities; is that right?  
16 A Yes, that sounds right.  
17 Q So the majority of your work, as you describe it,  
18 has been focused on what you describe as atypical  
19 sexualities?  
20 A That's the best all-encompassing phrase I can think  
21 of to capture it quickly, but, yes.  
22 Q What are atypical sexualities?  
23 A As I say, I use the term specifically to be broad,  
24 but it's not an official term. To break it down  
25 into pieces, I would say it breaks down into sexual

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1 orientations other than, you know, predominant  
2 heterosexuality.  
3 So it would include, you know, the various  
4 homosexualities, bisexualities, more recently  
5 people referring to themselves as asexual, some  
6 people adopt terms like hypersexual and so on.  
7 For gender identity, you know, of course, it  
8 includes identifying originally as male or female.  
9 But now people, of course, identifying with, you  
10 know -- again, adopting very many different terms,  
11 describing it in very many different ways. And, of  
12 course, in the group of atypical sexualities that  
13 are called the paraphilias.  
14 And, again, there's no concrete objective,  
15 clear demarcation for what counts as a paraphilia  
16 or not. In general, the phrase is used for people  
17 with a sexual interest pattern or sexual  
18 interest -- a sexual interest pattern either in  
19 people, kinds of people, or in activities that are  
20 not merely atypical, not merely statistically  
21 unusual, but that they experience that interest  
22 pattern as profoundly and as deeply as sexual  
23 orientation.  
24 To them, you know, if the thing that they're  
25 attracted to is not involved in the situation, it

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1 to them is not a sexual situation at all.

2 Q Is being transgender an atypical sexuality as you

3 describe it?

4 A As I describe it, I would include it among -- I

5 would include gender identities and gender

6 dysphoria within the term as I use those terms, but

7 I also have to acknowledge that, again, these are

8 not official terms with very specific lines. There

9 are other people who would use, you know, these

10 terms in different ways. And as long as we clarify

11 who we're talking about, you know, we can have a

12 perfectly productive conversation.

13 But I don't want to say, you know, I use the

14 term one way; and, therefore, you know, if somebody

15 else says it counts or it doesn't count that there

16 even is a right or wrong to it. But I use the term

17 because of its breadth in order to include things

18 like gender identity.

19 Oh, and also in the atypical sexualities, I

20 would also include the various kinks. And, again,

21 what's a kink versus what's a paraphilia is not

22 very clear. One blends into the others. There are

23 kinksters for whom, you know, if the thing that

24 they're into, yeah, some sexual encounters will

25 include it, others not. But for others if it

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1 doesn't include whatever thing it is that they're

2 into, it doesn't count at sex.

3 So it's tough to come up with a -- there's no

4 good objective, definite, uniformly accepted

5 boundary between them.

6 Q And have you done any research relating to

7 transgender people and/or gender dysphoria?

8 MR. RAMER: Objection to the form.

9 A I have.

10 Q What was that research?

11 A I've done research on various relatively technical

12 aspects, including, you know, how to develop, you

13 know, formal questionnaires and the psychometric

14 properties of those questionnaires.

15 I guess by psychometric I mean the statistical

16 properties of how to form a test in order to make

17 sure that the test is testing what you want it to

18 be testing and not merely just asking the same

19 question over and over and over again 10 different

20 ways, but not providing 10 different pieces of

21 information.

22 I've also done research on the role of the

23 brain and age of puberty and how going through

24 puberty at different ages affects, you know, the

25 course of brain development.

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1 Q Any research on the mental health outcomes of

2 people with gender dysphoria?

3 A No. I don't think I've done any direct work on

4 clinical outcomes.

5 Q On page 10 of your CV, which is up here, I just

6 want to ask you about a few things. You have here

7 listed under your "Funding History" a five-year

8 grant September 2015 entitled "Effects of sex

9 hormone treatment on brain development: A magnetic

10 resonance imaging" -- oh, no, sorry, is someone

11 moving this? Okay. Sorry.

12 MODERATOR: It said you didn't have access to

13 move it. So I was trying to give you control

14 again. I think it's Zoom messing up. Sorry about

15 that.

16 MR. STRANGIO: Oh, no, it's okay.

17 THE WITNESS: Oh, we need Lieutenant Uhura

18 again.

19 MR. STRANGIO: I thought it was me.

20 BY MR. STRANGIO:

21 Q I'm going to start that over. So we have here

22 under "Funding History" on your CV a five-year

23 grant from September of 2015, "Effects of sex

24 hormone treatment on brain development: A magnetic

25 resonance imaging study of adolescents with gender

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1 dysphoria."

2 Do you see where I'm looking?

3 A Yes, I do.

4 Q And what is this grant?

5 A It was essentially as it sounds. It was an attempt

6 to investigate what happens -- you know, what

7 happens in the brain, doesn't happen in the brain.

8 You know, in what patterns does the brain develop

9 amongst people who are being treated and receiving

10 different kinds of treatment, whether medical or

11 nonmedical, over the course of puberty.

12 Q And you were not the principal investigator in

13 this -- was it a study?

14 A It was a -- well, is a research grant. And so, it

15 was the request for the government funding in order

16 to conduct the study --

17 Q Did the government --

18 A -- studies, I should say.

19 Q Did the government provide the funding for this

20 particular research question?

21 A Yes, it did.

22 Q And you were not the principal investigator for

23 this grant?

24 A That is correct. That one was done by

25 Dr. VanderLaan.

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1 Q What was your role?

2 A Again, I handled the technical parts. I was the --

3 I don't want to say the expert on brain anatomy,

4 but I was the connective tissue between the, you

5 know, neuroanatomists and the other sex researchers

6 involved in the project.

7 Especially then, I was one of the very few

8 people in the world at that time that had a foot in

9 each of those camps and was able to help everybody,

10 you know, coordinate and cross these various fields

11 helping the sex researchers, you know, asking these

12 questions, helping them understand how MRI research

13 works. How, you know, brain analysis works. How

14 the statistics are done. Why things are done the

15 way that they're done. The strengths and

16 shortcomings and different methodological

17 principles available -- procedures available to

18 them.

19 As I say, it's a highly, highly

20 interdisciplinary field. And in order to use

21 really these, you know, very, very high-end

22 research techniques, you know, there are only a few

23 people who can at the same time talk to both the

24 sex researchers and the statisticians and the

25 neuroanatomists.

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1 Q And this was a grant for a five-year period; is

2 that right?

3 A Yes, that's correct.

4 Q Were your findings published?

5 A I hesitate to say mine, because those, of course --

6 that was before I actually left the academic world.

7 But, yes, it's been published.

8 Q And where is it published?

9 A Oh, goodness. I don't remember. I'd have to look

10 it up.

11 Q Is it in your CV?

12 A No, I didn't participate. As I say, once I left

13 the academic world, then -- I was going to say left

14 the project, but that makes it sound a bit more

15 dramatic than true.

16 I'm, you know, in regular e-mail contact with

17 several of these people and answer questions where

18 I can here and there, but I wasn't dedicating --

19 Q But you didn't stay on as a co-investigator on this

20 particular grant?

21 A Yes, in the sense that I didn't have the kind of

22 active, ongoing, you know, regular input attending,

23 you know, the weekly meetings and so on. But I --

24 at the same time, it wouldn't be fair to say that

25 there was some kind of formal resignation process.

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1 It was just we all moved on, and that's that --

2 well, I moved on, I guess I should say.

3 Q And you're not listed in any of the papers that

4 were published as a result of this grant?

5 A That's correct.

6 Q And there's a second grant listed at the top. That

7 is from July of 2018 for five years. And this was

8 "Brain function and connectomics" --

9 A Connectomics.

10 Q -- "connectomics following sex hormone treatment in

11 adolescents experience gender dysphoria."

12 Was this a grant that was also received by

13 your -- by this research team?

14 A Yes.

15 Q And you were not the principal investigator on this

16 grant?

17 A That's correct.

18 Q Do you remain a co-investigator on this one?

19 A The situation is the same. This one, you know,

20 was -- it was awarded in 2018, but, of course, the

21 design and the submission was ahead of that.

22 My involvement was the same. I was

23 essentially the consultant, you know, helping

24 everybody communicate to each other, helping them

25 figure out, you know, what are the kinds of brain

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1 features they should be looking at as the next

2 logical steps.

3 Q And in what year did you leave -- or let's just --

4 I'll rephrase that.

5 In what year did you move on from this

6 particular academic position and, therefore, this

7 grant?

8 A I'd have to look through my e-mails to find the

9 actual date of my formal letter of resignation from

10 CAMH, but all of this was happening roughly around

11 2017, 2018.

12 Q And so you will not be an author on any of the

13 published findings out of this grant?

14 A I've learned never to say never. It's not my plan

15 and intent, but that isn't to say that if they come

16 to me with, "James, we found, you know, this

17 strange thing that we thought you'd find

18 interesting, or we need your input on, or we ran

19 into some piece of the mathematics we can't figure

20 out," again, I have no -- I'm still a scientist at

21 heart. I still enjoy the material. And I would do

22 my best to try to fit it in.

23 Q For the two pieces of grant funding listed in your

24 CV under "Funding History," you don't anticipate

25 being involved in the published findings of either

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1 of them?

2 A That's correct.

3 Q How were the study participants recruited for these

4 two grants?

5 A Through the clinics that see kids with gender

6 dysphoria.

7 Q And do you know approximately how many individuals

8 were enrolled in each?

9 A No.

10 Q More than 50?

11 A Again, I don't know. There are oftentimes changes

12 in design that would have happened, you know, once

13 the project itself got going.

14 As I say, I'm not involved in the day-to-day

15 running of the project. So I wouldn't be apprised

16 of progress or changes.

17 Q And how would you describe the study design of

18 these two grant projects?

19 A Case control.

20 Q And what does that mean?

21 A A group of people who are undergoing one set of

22 circumstances and series of brain scans, and we

23 come up with what's essentially an average brain,

24 if it could be called -- average brain image, if

25 one could be called that. And then compared to

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1 people as matched on as many variables as we can,

2 you know -- or they can, I should say, match them

3 on similarly developed and equivalent average brain

4 of the control group. And then through an

5 exquisitely bizarre set of statistics use what's

6 more like image analysis than, you know,

7 traditional statistics in order to identify

8 patterns in the averages of the images and connect

9 that back to what are those differences in the

10 images and the patterns, you know, tell us about

11 the structure of the brain itself.

12 And then in turn, what do those changes in the

13 structure of the brain tell us about the

14 developmental processes that led to those

15 differences.

16 Q And the control groups, were those study-enrolled

17 participants, or was that a control developed from

18 data of the general population?

19 A I'm sorry, could you ask that again? I'm not sure

20 those are different groups.

21 Q Was the -- were there particular individuals

22 enrolled in the study who were not receiving

23 treatment that represented a control group?

24 A The control group would be people not receiving any

25 kind of gender-related treatment, yes.

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1 Q And they also had a diagnosis of gender dysphoria?

2 A No, these would be -- depending on the question,

3 each of these, again, were grants, you know, that

4 were enabling the funding of several different

5 research projects all boiling down to neuroimaging,

6 but it wasn't like the final research paper which

7 reported a single set of analyses, you know, to

8 answer a specific question.

9 Different parts of the grant were aimed at

10 answering different questions, each using different

11 kinds of methods. Some would compare the gender

12 dysphoric kids to non-dysphoric kids. Some would

13 compare the gender dysphoric kids to their

14 non-dysphoric siblings.

15 Q Got it.

16 A And in early pilot studies, we would even do it

17 versus what I can only call stock brains, you know,

18 there exist large databases, you know, of images

19 that have been accumulated over many years, you

20 know, and are just available as gen -- I hesitate

21 to use the word generic, but generic-controlled

22 samples because -- especially because getting MRIs

23 on someone is so expensive that if we can get just

24 a group of healthy controls that anybody can use,

25 you know, with socioeconomic status already

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1 reported and controlled and age already reported

2 and controlled that they, you know, can be used as

3 a generic set of -- a generic control sample for

4 just about any study. Typically that would be done

5 early in development -- early in the development of

6 a study.

7 Q But for these particular studies, you had at least

8 two variables, one of which was experiencing gender

9 dysphoria and one of which was receiving sex

10 hormone treatment?

11 A My hesitation is a quibble in that, you know, those

12 are not necessarily separate variables, you know,

13 so they wouldn't get chopped apart so easily. But

14 the issues, the features, you know, being

15 investigated sometimes were the gender dysphoria

16 itself and sometimes were the effects of the

17 medications and treatments that they were receiving

18 or potentially receiving.

19 Q But your controls neither had gender dysphoria, nor

20 were receiving sex hormone treatment?

21 A That's my recollection of the plan, yes.

22 Q Okay.

23 A As I say, my involvement was in the design of --

24 was in the grant application which proposed the

25 design of the studies. And it's not unusual for,

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1 you know, studies to need to be adjusted according  
2 to whatever's going on, you know, once the feet hit  
3 the laboratory ground.  
4 So I couldn't say that, you know, as the  
5 studies were conducted and after my involvement was  
6 completed, I'll say, I can't speak to the current  
7 status of the programs and whether any changes were  
8 made, but the original plan was to do it as we  
9 described.  
10 Q So going back to your clinical practice, you're an  
11 adult clinical psychologist; is that right?  
12 A Yes, that's correct.  
13 Q And as we discussed, you currently are treating  
14 approximately 10 patients in your private practice?  
15 A Yes.  
16 Q Are any of those patients transgender?  
17 A They're not. No one is transgender in the way that  
18 most of the public uses the term currently. But,  
19 as I say, especially the public use the term in  
20 relatively vague ways that don't always match up  
21 with the science.  
22 But I do have one at the moment for whom  
23 identity issues in general are a topic of their  
24 concern but -- a topic of their concern. So it  
25 really would depend on to whom I'm talking and in

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1 what context would this person's situation count is  
2 a legitimate question. And it depends on how  
3 people are using whatever terms and whatever ideas.  
4 So if somebody, you know, gave me a  
5 description or said, you know, is this a person  
6 concerned with this, you know, we could say yes or  
7 no. But whether the person, you know, counts as  
8 gender dysphoric, counts as transsexual and so on  
9 depends on how the person is using those terms.  
10 Q Is that person an adult?  
11 A Yes.  
12 Q And you have never treated a prepubertal  
13 transgender child; is that right?  
14 A Yes, that is correct.  
15 MR. RAMER: Objection to the form.  
16 Q And you've never treated a transgender adolescent  
17 under the age of 16; is that correct?  
18 A Yes, that's correct.  
19 Q Have you treated anyone under the age of 16?  
20 A No, I have not.  
21 Q And as I understand from previous testimony, the  
22 extent of your clinical experience with transgender  
23 adolescents has been providing counseling to eight  
24 transgender patients between the ages of 16 and 18  
25 in your career; is that right?

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1 A For being a formal clinician for cases, that number  
2 sounds about right, yes.  
3 Q And that was the number you gave in your testimony  
4 in Alabama in May of 2022. So has that changed  
5 since then?  
6 MR. RAMER: Objection to the form.  
7 A No, I don't think there's been anybody else in that  
8 age range since that time.  
9 Q Have you ever diagnosed a child with gender  
10 dysphoria?  
11 A No. Diagnosis, of course, is a subset of clinical  
12 activities. So it's the same -- it's within the  
13 same boundaries.  
14 Q Since you've never treated a child, you've never  
15 diagnosed a child with gender dysphoria it would be  
16 fair to say?  
17 A That is it exactly. Lovely when logic lines up.  
18 Q It's rare.  
19 A A rare pleasure we can call it.  
20 Q Have you ever diagnosed an adolescent with gender  
21 dysphoria?  
22 A Not that I recall.  
23 Q Have you ever monitored an adolescent patient with  
24 gender dysphoria who was being treated with hormone  
25 therapy?

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1 A That would depend on what one means by monitored.  
2 I wouldn't have followed such a person or monitored  
3 their medical treatment, for example. You know,  
4 looking out for or interviewing regarding, you  
5 know, physical side effects, that would have been  
6 done by one of the physicians on the person's  
7 clinical care team.  
8 But I would have been involved in, you know,  
9 progress and effects and so on on the person's  
10 mental health status and development while they  
11 were undergoing physical transition.  
12 Q Well, you would have. Were you ever involved?  
13 A I was involved in such cases, yes. I meant  
14 hypothetically to be the different hypothetical --  
15 to be the different ways to interpret the question,  
16 not my role in the case.  
17 Q So that would have been with the eight patients  
18 that you have seen between the ages of 16 and 18,  
19 some of those patients were on hormone therapy?  
20 A Yes, that's correct.  
21 Q And how were you monitoring their well-being on  
22 hormone therapy?  
23 A Oh, regular mental health assessment. As people  
24 were going through, you know, transition, you know,  
25 part of that, you know, during the clinical

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1 standards, especially of that time, you know,  
2 checking in regularly with their -- with  
3 psychologists and mental health professionals, you  
4 know, was part of the process.  
5 So it was a combination of reviewing the  
6 various documents such as from schools and  
7 employers where relevant. And a lot of it, of  
8 course, face-to-face interviews and with the  
9 clients themselves.  
10 Q And when was this?  
11 A This would have been over the course of my -- while  
12 I was at CAMH for my internship and a few years  
13 after -- several years after.  
14 Q Can you give me those particular range of years?  
15 A Oh, 1998 through probably roughly 2005.  
16 Q So you have -- since 2005, have you provided  
17 clinical treatment to any transgender adolescent?  
18 MR. RAMER: Objection to the form.  
19 A Of the eightish, a small -- twoish, perhaps, were  
20 between 2005 and today.  
21 Q And when was the most recent adolescent patient  
22 with gender dysphoria that you saw as a clinical  
23 psychologist?  
24 A Three years ago, four years ago. Again, depending  
25 on, you know, who counts which way, there are

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1 people who come in periodically for -- to check in  
2 or catch up or somebody is now later experiencing,  
3 you know, an unrelated issue, but because they know  
4 who I am and we have a developed relationship, you  
5 know, we can continue consultation or therapy or  
6 whatever's appropriate, or there will be somebody,  
7 again, not currently concerned with a  
8 gender-related issue, but had gender-related issues  
9 earlier in their lives.  
10 So it's integrated as part of a comprehensive  
11 assessment in getting to know the person, but not  
12 necessarily the topic that brings them into therapy  
13 to begin with or brings them into therapy to see me  
14 specifically.  
15 Q So just to summarize, in your career you have seen  
16 approximately eight transgender adolescents as a  
17 clinical psychiatrist -- excuse me.  
18 In the course of your career, you've seen  
19 approximately eight transgender adolescents between  
20 the ages of 16 and 18, six of those were between  
21 1998 and 2005?  
22 MR. RAMER: Objection to the form.  
23 A That sounds basically correct, yes. My, you know,  
24 knowledge and expertise and the material, of  
25 course, is about the science itself, not in the --

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1 when I see these people, this is what I do, as I  
2 say. I'm relying on the evidence itself, not my,  
3 you know, personal anecdotal experience with them.  
4 Q And for the eight patients that you saw as a  
5 clinical psychologist, what was the nature of the  
6 counseling that you provided?  
7 A The nature of the therapy and counseling with them  
8 really depended on whatever it was that was going  
9 on in their lives.  
10 The research demonstrates that the people who  
11 do best are the ones who have -- who are able to  
12 navigate and who have the support in order to  
13 navigate typical, I'll say, life stretches and  
14 developmental courses.  
15 So for many of these people, it was dealing  
16 with usual, you know, what do I do with my life, or  
17 I'm upset about or I'm having difficulty finding  
18 educational experiences or friendship groups or,  
19 you know, significant others.  
20 So they were often -- I don't want to use the  
21 word generic, but they were, you know, very similar  
22 issues to what, you know, other people attending  
23 therapy would be experiencing. But the potential  
24 role that these other indicators had was greater  
25 for most of these people because they had

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1 additional stressors to be going through; and,  
2 therefore, needed that much more strength in order  
3 to be able to handle the stresses that accompany  
4 transition.  
5 So the content of the therapy with them  
6 usually would be the same content as with anyone  
7 else, but there were -- there was for many of these  
8 people more on the line, for a lot of people a  
9 decision, for example, about what -- in the U.S.  
10 you say college, in Canada we say university -- in  
11 decisions about what university to attend would be  
12 attached to social engagements, social  
13 opportunities. The pressure on somebody who, of  
14 course, is not just gender dysphoria, sexual  
15 orientation often can have a similar impact, being  
16 in urban versus rural environments, conservative  
17 versus liberal environments. There's more on the  
18 line for somebody -- for youth experiencing gender  
19 dysphoria in planning or undergoing transition.  
20 So the particular issues are the same. I'm  
21 sorry, I'm repeating myself, but the circumstance  
22 and context in which they're doing it is more  
23 complicated or there's more involved in it.  
24 So it's often very useful for them to  
25 double-check their thinking or to receive, you

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1 know, feedback from somebody who's, you know,  
2 familiar with and experienced with, you know, other  
3 people going through similar issues.  
4 Q So in some sense, you are providing to these eight  
5 adolescent patients counseling comparable to what  
6 you would provide to other patients?  
7 A Predominantly. For some people it was specific  
8 questions or curiosities or questions or their own  
9 concerns about transitions, possibilities of  
10 transitions, possible futures for them. But they  
11 were not defined by their gender dysphoria or trans  
12 status. They had all the regular issues that, you  
13 know, very many youth have.  
14 Q I want to talk for a minute about your appearance  
15 in other cases as an expert. So I'm going to just  
16 go right down to this last page here.  
17 I'm trying to think, you mentioned a few  
18 states that aren't listed here at the beginning.  
19 So I guess my first question is: To the best of  
20 your recollection, is this a complete list of the  
21 cases in which you have been retained as an expert  
22 witness?  
23 A No. I think there have been some new ones since  
24 then.  
25 Q Can you tell me what those ones are?

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1 A I'm looking over, because on my bookshelf I have a  
2 three-ring binder for each one, because that's my  
3 list.  
4 Q Why don't we do this, because you said -- is one  
5 additional case Kentucky?  
6 A Yes.  
7 Q Is one additional case Montana?  
8 A Yes. My hesitation with that is that it's going to  
9 happen. They sent me the contract, but I haven't  
10 signed it and returned it yet. But by the end of  
11 business tomorrow, the answer will be yes.  
12 Q Okay. So let's just say there's two or three  
13 others that are in the works in which you have not  
14 yet necessarily submitted any form of testimony.  
15 Is that accurate?  
16 A Again, perhaps I'm quibbling on the phrasing, but  
17 for submitting testimony for Kentucky, I submitted  
18 my declaration 48 hours ago, I think.  
19 Q Okay. Understood. And for Montana, you have not  
20 submitted anything yet?  
21 A Correct. As I say, that -- you know, we're all  
22 anticipating it about to happen. And I would not  
23 be at all surprised if you're even more familiar  
24 with my deadlines on this one than I am. But it  
25 hasn't -- I'm waiting for the -- there's a funny

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1 old expression, dot and tittle. People used to dot  
2 the "I" and cross the "T." Turns out that there  
3 are words for those. The dot over the "I" is  
4 called the jot, and the cross on the "T" is called  
5 a tittle.  
6 Q So that is where we are with respect to that.  
7 Understood.  
8 Among these cases listed, can you tell me  
9 which ones you were deposed in?  
10 A The Indiana case, A.M. versus. I would have to  
11 check my notes for BPJ.  
12 Q Anything else you recall?  
13 A No, not that I recall, because several of the  
14 cases -- well, a little less than half now were  
15 Frye hearings, they don't involve depositions.  
16 Q Those are the criminal cases -- or, sorry, civil  
17 commitment cases?  
18 A Yes. Again, I wasn't involved in the civil  
19 commitment itself. I was involved in the Frye  
20 hearing which, you know, was going to then get used  
21 in the -- the questions to those were whether the  
22 person was subject to civil commitment in the first  
23 place, hence the Frye hearing in order to  
24 investigate the scientific issues to decide whether  
25 the civil commitment regulations pertained at all.

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1 Q So let's -- we'll say -- we will continue to update  
2 as your testimony changes in these various cases  
3 and call it an ongoing process. Does that sound  
4 fair?  
5 A That, yes, indeed sounds fair. As I say, the  
6 nature of these particular set of cases, it's, you  
7 know, me versus various combinations of, you know,  
8 people from the AR office versus various subsets  
9 of, you know, the same group of experts.  
10 So it's, as I say, a rather bizarre, I don't  
11 know if I can say unusual, but eccentric, novel  
12 situation.  
13 Q Well, going back to the cases involving transgender  
14 people, did you ever reach out and offer yourself  
15 as an expert in any of those cases?  
16 A No, they all came to me.  
17 Q And one of the cases you have listed here on your  
18 CV, No. 5, is Dekker, et al. v. Florida Agency for  
19 Health Care Administration. Do you see that?  
20 A Yeah.  
21 Q What was the nature of your involvement in that  
22 case?  
23 A They needed a -- well, my basic involvement was the  
24 same as with the other cases. They needed, you  
25 know, to know what the science said and, you know,

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1 what the -- and feedback on the experts -- what the  
2 other experts have written and then, you know,  
3 comparing their claims against the content of the  
4 scientific literature again.  
5 So the basic content of my involvement in that  
6 case was exactly the same as my involvement with  
7 each of the cases, is here are a bunch of claims,  
8 which ones match up with the science.  
9 Q And you wrote a declaration in that case?  
10 A Yes.  
11 Q But you were not called to testify at trial in  
12 Dekker; is that right?  
13 A That's my recollection, yes. I don't think it's  
14 gone to trial yet.  
15 Q I can represent to you that it has gone to trial.  
16 So --  
17 A Oh, okay.  
18 Q -- if you haven't -- if you didn't testify there, I  
19 gather you didn't testify at that particular trial.  
20 A That would make sense. My amnesia gets me, but not  
21 that bad.  
22 Q So, yes, you did not unknowingly testify at the  
23 Dekker trial we're going to say.  
24 A I almost want to say, can I testify in my sleep?  
25 Does that happen?

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1 Q I mean, you're the psychologist.  
2 A Perfect answer.  
3 Q And, yeah, so that was my only question on Dekker.  
4 So in your declaration in this case, you write  
5 about the practices of a selection of your European  
6 countries with respect to treatment of adolescents  
7 with gender dysphoria; is that right?  
8 A Yes.  
9 MR. STRANGIO: And, Joel, could we pull up  
10 Exhibit 1, which is Dr. Cantor's declaration in  
11 this case. I think I am -- am I in control?  
12 That's a great question, but --  
13 THE WITNESS: Is this another you're the  
14 psychologist?  
15 MR. STRANGIO: Yeah, I'm about to start asking  
16 for advice over here, but for now I think I can  
17 actually use this Zoom mechanism.  
18 BY MR. STRANGIO:  
19 Q Okay. So you do not provide a comprehensive  
20 summary of all the practices of country -- excuse  
21 me, you do not provide a comprehensive summary of  
22 the practices of all of the countries in Europe; is  
23 that correct?  
24 A Correct. Again, my content was not about the, you  
25 know, political situation, policy situation. My,

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1 you know, comments are about the science itself.  
2 So I included -- what I included were the  
3 systematic reviews that were available, all of the,  
4 you know, comprehensive systematic reviews that  
5 were available.  
6 And so, the countries that I mentioned are the  
7 countries that have used them, that have engaged in  
8 them, but I haven't -- didn't attempt to make a  
9 review of the political policy orientations of any  
10 countries -- well, set of countries.  
11 Q So England, Finland, Sweden, France and Norway are  
12 the only countries that have done systematic  
13 reviews of the evidence with respect to the  
14 treatment of adolescents with gender dysphoria?  
15 A That I am aware of. France didn't conduct its own.  
16 They conducted a review, but not the -- but not a  
17 systematic review of the original research.  
18 Q Then why did you include France?  
19 A They conducted a non -- a review, but not a formal  
20 systematic review of the evidence as they were, you  
21 know, evaluating their own set -- oh, actually,  
22 that would be a better way of phrasing it.  
23 That I included the countries that have, you  
24 know, engaged in reviews of their policies, but, of  
25 course, the ones that I deal with, you know, in its

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1 own section emphasizing are, of course, the  
2 systematic -- the ones that conducted systematic  
3 reviews.  
4 Q So there are no other countries in Europe that have  
5 engaged in reviews of their own policies other than  
6 these five countries?  
7 A I don't think I can claim negative in that I  
8 haven't looked at every single country that did.  
9 Essentially these are the ones who have done it,  
10 who have conducted the kinds of reviews and then,  
11 you know, made conclusions and asserted policies on  
12 the basis of those reviews.  
13 But I couldn't say that no other country has  
14 done it more than feasible -- it's theoretically  
15 possible, especially because they don't all publish  
16 everything in English, it's certainly possible that  
17 others have that I haven't become aware of.  
18 Q But these were the ones that did reviews and came  
19 to conclusions with respect to the evidence similar  
20 to your own?  
21 A Well, the ones that I reviewed, the ones that I  
22 included would -- included their conclusions,  
23 period. They happened to have come to the same  
24 conclusions about the science that I've come to  
25 about the science, but there was no -- I wouldn't,

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1 in fact I would work very hard to avoid, you know,  
2 the kind of cherry-picking where I would only cite,  
3 you know, or pick the ones who come to a particular  
4 conclusion in any direction.  
5 Q But you're just not sure whether there are other  
6 countries in Europe that have done different  
7 reviews?  
8 MR. RAMER: Objection to the form.  
9 A Again, I haven't attempted a country-by-country  
10 search, you know, each in their various languages  
11 to see if there's something that's been less  
12 publicized or less internationally released.  
13 So I can't say with any kind of certainty that  
14 none exist, but these are the -- so I can't say  
15 that none exist. I can only say that I'm not aware  
16 of any.  
17 Q So you didn't do a systematic review of all of the  
18 countries' policies?  
19 A Of countries' policies, correct.  
20 Q On page 7, paragraph 16, you write here at the  
21 bottom -- towards the bottom of paragraph 16  
22 speaking about the European policies, "These range  
23 from medical advisories to outright bans on the  
24 transition of minors." Did I read that correctly?  
25 A Those sounds like my words. I'm just squinting to

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1 take the --  
2 Q Yeah, here we go.  
3 MR. RAMER: And, Doctor, you have your -- am I  
4 correct you have your blank printout as well?  
5 Chase, is it okay if he consults that?  
6 MR. STRANGIO: Yes, absolutely. I was about  
7 to get my reading glasses, but I also made it  
8 larger if that's helpful.  
9 A Both are good, as I say. And here's my three-ring  
10 binder for this one.  
11 Q So, again, we're in paragraph 16, page 7. "These  
12 range from medical advisories to outright bans on  
13 the medical transition of minors."  
14 A Yes.  
15 Q Which of the countries that you identified in your  
16 declaration have outright bans on the medical  
17 transition of minors?  
18 A The UK, Sweden, Finland. Am I forgetting somebody?  
19 Q So is it your opinion --  
20 A Yes, those three.  
21 Q It's your opinion that the UK, Finland and Sweden  
22 have outright bans on the medical transition of  
23 minors?  
24 A People can certainly quibble over the definition of  
25 ban, but they have essentially, you know, reversed

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1 course from the wide availability that they had  
2 restricting it only to specific formal approved,  
3 you know, research studies.  
4 Q So you consider accessing treatment in a formal  
5 approved research study to be an outright ban on  
6 medical transition?  
7 MR. RAMER: Objection to the form.  
8 A There's something funny embedded in that question.  
9 That one is that they are restricted to research  
10 studies which in turn select only particular people  
11 under particular circumstances -- in particular  
12 circumstances when they fit the -- whatever the  
13 inclusion criteria are for the study. I don't  
14 think it would be accurate to refer to that as  
15 access.  
16 It's not access. You know, what they would be  
17 participating in, what they would be volunteering  
18 for is participation in a research study as a  
19 research subject, which is in turn medically  
20 supervised and so on, which is -- again, especially  
21 in countries -- this is one of the main  
22 distinctions between the U.S. and the rest of the  
23 world is that, you know, it's a public healthcare  
24 system. Access means access.  
25 And, you know, so participating in or

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1 volunteering for studies that involve, you know,  
2 physical transition is not part of the you go to a  
3 doctor and you show your health card and you get  
4 access. That's -- as I said, that term does not  
5 accurately depict their situation.  
6 Q We're not talking about access. We're talking  
7 about --  
8 A I'm sorry, I thought you used the word.  
9 Q -- outright bans on the medical transition of  
10 minors.  
11 So my question was: Do you consider  
12 enrolling -- limiting treatment to a research study  
13 to be an outright ban on the medical transition of  
14 minors?  
15 MR. RAMER: Objection to the form.  
16 A Again, the use of the word treatment has some  
17 assumptions built into it that don't very  
18 accurately fit.  
19 What the results of the systematic reviews of  
20 the science and, you know, to the best of my  
21 reading the science itself, says is that these are  
22 not ready to be called treatments. These are  
23 experiments. We're not sure when, for whom, under  
24 what circumstances and in which way, you know,  
25 these kind -- these interventions are helpful

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1 versus harmful and how to weigh the potential risks  
2 with the potential benefits.  
3 It's not yet ready for prime time. To refer  
4 to it as a treatment would insinuate at least that,  
5 you know, it has already, you know, been subject to  
6 the kinds of analyses that we apply in providing  
7 evidence-based medicine.  
8 Q Okay. Well, let's ask more specifically. None of  
9 the European countries that you mention in your  
10 report have restrictions comparable to the one that  
11 was passed in Indiana; right?  
12 MR. RAMER: Objection to the form.  
13 A Again, it's -- I can tell anybody, to the extent of  
14 my knowledge, what the content of the science is.  
15 And when I -- and to the extent that, you know, any  
16 given, you know, legal proceeding or law is written  
17 in lay language that a non-politician, non-lawyer  
18 can read, I can, you know, compare it against the  
19 content of the science.  
20 The only distinction -- but I can't say that I  
21 know the details of all the European various  
22 regulations or those particular states within the  
23 U.S. The only distinction I'm aware of is whether  
24 research purposes are permitted exemption within  
25 the ban. But I don't think it would be legitimate

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1 to say that if there's an exception to it then it's  
2 not a ban.  
3 Q So you would call it an outright ban even if it had  
4 an exemption?  
5 MR. RAMER: Objection to the form.  
6 A It would depend on the nature of the exception.  
7 Q So if there was an exception for research, for  
8 example, you would call it an outright ban on  
9 treatment? Sorry, excuse me.  
10 If there was an exception for research, you  
11 would call it an outright ban on the medical  
12 transition of minors?  
13 MR. RAMER: Objection to the form.  
14 A I would hesitate to make a blanket statement in  
15 case -- you know, I can imagine other at least  
16 theoretical, you know, reasons that I would or  
17 wouldn't call it. But I don't think that having an  
18 exception -- for this particular situation, you  
19 know, permitting -- again, we're not even talking a  
20 particular research study that's ongoing in any of  
21 these.  
22 Such laws were -- regulations in Europe were  
23 going on despite that there was no research going  
24 on. That was one of the, you know, almost  
25 ubiquitous criticisms, was the lack of research.

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1 And research programs have not been initiated in  
2 these places yet.  
3 So if a law, you know, permits -- in theory,  
4 in the future if somebody else comes up with this  
5 thing that doesn't yet exist, the current situation  
6 is still such that it's not available, but we're  
7 leaving room in the law just in case for the  
8 future?  
9 It's difficult -- in that circumstance, yes, I  
10 think the word ban is including outright ban as a  
11 perfectly legitimate descriptor.  
12 Q So in the UK currently, can an adolescent with  
13 gender dysphoria access puberty blockers as part of  
14 an approved research protocol?  
15 A That's my -- as I say, I don't study closely the  
16 public policies of it. I can testify only to the  
17 content -- really only to the content of the  
18 science. But the way you describe it is roughly  
19 what I recall of their current policy. But I don't  
20 think that they have yet designed any such research  
21 studies.  
22 So even though it, you know, maintains and  
23 reserves the potential, and as best as I can tell  
24 the intent in the future to do that, the process  
25 today, still for kids today, is that it's going to

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1 be a ban for the moment.  
2 Things may -- as I say, exceptions, you know,  
3 they're leaving room for potential exceptions in  
4 the future, but they haven't happened yet.  
5 Q So in paragraph 16 you talk about the various  
6 policies and details about the policies.  
7 Is it now your position that you're not  
8 qualified to talk about the various policies in  
9 these different European countries.  
10 MR. RAMER: Objection to the form.  
11 A I refer to the content of their reviews of the  
12 science. And I, you know, share, re-review their  
13 conclusions of the science. And I demonstrate not  
14 their policies, but their changes to their policies  
15 in response to their evaluations of the science.  
16 Q But you might not be that familiar with how those  
17 reviews are implementing the practice with respect  
18 to the delivery of healthcare in these countries.  
19 Is that fair?  
20 MR. RAMER: Objection to the form.  
21 A That's a bit overstated, I think. I haven't taken,  
22 and I have no current plans to take thorough -- and  
23 I speak as a scientist when I say thorough, I mean  
24 almost obsessive -- investigation of the ins and  
25 outs of the details. But on a relatively high

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1 level, I'm generally aware of their application or  
2 of applications of science and how it's getting  
3 used or misused in public policy.  
4 But, as I say, I'm not a public policy expert.  
5 I haven't, you know, gone into the details of, you  
6 know, countries that are changing. I'm only  
7 investigating, you know, the individual groups as  
8 they are trying to gather the science for the  
9 application of their policies.  
10 I think it would be fairer to say that I've  
11 spent some time and attention on the use of science  
12 in policy -- or the uses of this present body of  
13 science in policy, but I haven't studied, you know,  
14 policy in and of itself.  
15 Q So is it your position that no adolescents with  
16 gender dysphoria are currently receiving puberty  
17 blockers to treat their gender dysphoria in the UK?  
18 A No, that doesn't sound correct to me. Exactly  
19 because they're aware -- pardon the pun -- but  
20 because their policies are in a transitional  
21 status, there were, of course, you know, youth who  
22 were already receiving medical transition services.  
23 And that, as best as I recall, has been  
24 grandfathered in. I don't think that they, you  
25 know, stopped, you know, anybody who was already

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1 receiving treatment. So it wouldn't be fair to say  
2 that nobody is currently receiving treatment.  
3 What they say they're aiming to put  
4 limitations on are the unnecessary or excessive or  
5 over availability where medicalized transition  
6 looks like is being used to displace other  
7 interventions that very, very feasibly could be  
8 better matched to these kids' needs and without the  
9 sacrifices and risks that are associated with  
10 physical transition.  
11 Q So there are youth in the UK currently receiving  
12 puberty blockers for gender dysphoria?  
13 MR. RAMER: Objection to the form.  
14 A Again, I hesitate to say that, you know, flat out  
15 as a matter of fact, because that's not the --  
16 they've already -- that's no longer a piece of --  
17 you know, they've already completed their review of  
18 the science. And so, that kind of completes how --  
19 you know, that level of how closely I'm  
20 following -- or that section of what I'm following  
21 of what they're doing.  
22 They're now -- the implementation or what --  
23 the policies to which they're applying the science  
24 is, you know, less a focus of what I follow than  
25 the application of the science itself. Their

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1 review of the science is largely complete.  
2 Q So at least as to individuals who had been  
3 previously receiving puberty blockers for gender  
4 dysphoria, that treatment -- or, excuse me, that  
5 care is ongoing?  
6 MR. RAMER: Objection to the form.  
7 A My basic recollection is that they didn't cut off  
8 from treatment people who were -- medical treatment  
9 people who were already receiving medicalized  
10 transition services or at least while a minor.  
11 Q That would be true for hormone therapy as well?  
12 A I'm including hormone therapy or what most people  
13 call hormone therapy under medicalized transition,  
14 yes.  
15 Q And in your report you also reference Finland. And  
16 just right now you referenced Finland as well; is  
17 that right?  
18 A Yes, that sounds right.  
19 Q And do you read and write in Finnish?  
20 A No, I do not.  
21 Q Do you have a certified translation of the COHERE  
22 2020 document regarding their review?  
23 A Not of the full document, no, I don't think.  
24 Q So you're basing your understanding of the Finnish  
25 review on an uncertified translation?

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1 A No, that's not exactly true either. As a matter of  
2 fact, I was due to go to Finland in the next couple  
3 of weeks, but had -- you know, for a conference  
4 that they're holding, you know, bringing together  
5 the experts on exactly these topics.  
6 And, of course, I'm in regular communication,  
7 you know, with people all over the world within my  
8 field and more and more commonly with this one.  
9 You know, they've also been, you know, discussing  
10 the issues themselves regularly in the media in  
11 English and Finnish.  
12 And, you know, to the extent that they have  
13 also been, you know, releasing statements and  
14 conversations with other people within the program  
15 have been, again, in English. And all of it is  
16 exactly consistent with each other. Nobody's  
17 identified and nobody's, you know, claimed that  
18 there have been any contradictions in any of the  
19 available translations in any of the statements  
20 that the scientists involved with it -- you know,  
21 what they have said in English versus what they  
22 have said in Finnish.  
23 There have been no contradictions between the  
24 conclusions that they came to versus the  
25 conclusions that have been produced by scientists

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1 in other countries.

2 Q But typically are the only systematic review an

3 outline of the medical practices in Finland -- the

4 only official versions of the systematic review for

5 the Finnish medical authorities are in Finnish?

6 MR. RAMER: Objection to the form.

7 A I would have to check through my files to see if

8 that's still true. Another publication -- by

9 coincidence, not soon after I submitted this

10 declaration -- again, I would have to look through

11 and check to see if those were Sweden or Finland,

12 recently published in English a peer-reviewed

13 document, you know, summarizing the content of what

14 was originally in their native language.

15 And, again, I keep mixing up several of the

16 Scandinavian states, Finland and Sweden, and which

17 one contained within itself, you know, English

18 language summaries.

19 English is -- of course, you know, despite the

20 original languages that many reports are published

21 in, you know, throughout all of science, English is

22 still the lingua franca. The circulation of the

23 materials, the abstracts of the materials and so on

24 are still circulated in English.

25 And my conversations with the scientists

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1 themselves, including the ones who publish the

2 relevant studies, you know, we're in regular

3 contact with each other who, you know, certainly

4 have confirmed our whole conversations were based

5 on, you know, the idea of what the studies said --

6 of what the studies resulted. Also --

7 Q And by studies, you don't mean studies, you mean

8 systematic reviews; right?

9 A I'm kind of blending -- your mind is going exactly

10 where mine was headed. These two are blended. The

11 content of these systematic reviews -- of

12 systematic -- the content of systematic reviews is

13 largely the list of the papers getting reviewed.

14 So even though -- you know, and it is not at

15 all difficult to determine in any language Appendix

16 A is the list of studies included, you know, the

17 list of studies in Appendix B are the studies that

18 were not included. And those list of studies, you

19 know, have English titles published in English

20 journals and so on. And I'm very, very familiar

21 with every one of those studies.

22 So they have produced, you know, what are

23 entirely transparent lists of what was included and

24 what was not included. This was not a dense text

25 in which one needs a translation in order to

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1 identify subtle potential differences between how

2 something was originally written versus described.

3 The differences between what is included and what

4 is not, what was determined to be useful versus

5 not. And the result is very, very easy to

6 determine.

7 And, as I say, the studies themselves are

8 exactly the same studies that I'm very, very

9 familiar with to begin with.

10 MR. RAMER: Chase, if you have a good breaking

11 point, we've been going a little over an hour,

12 but --

13 MR. STRANGIO: I think if it's okay with you

14 both, I'd like to just finish up this section, and

15 then we could even break for lunch around noon, or

16 what are you thinking?

17 MR. RAMER: Over to Dr. Cantor, how he --

18 MR. STRANGIO: Yeah, are you --

19 THE WITNESS: That's fine with me.

20 MR. STRANGIO: Okay.

21 BY MR. STRANGIO:

22 Q So let's just take a step back. Finland has not

23 cut off puberty blockers and hormone therapy for

24 patients who had previously been receiving those

25 interventions, have they?

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1 A To the best of my knowledge, Finland has grand-

2 fathered people already receiving medical

3 treatments, and that the ban is for additional

4 cases.

5 They're attempting to stave off the -- or halt

6 the flood of new cases for which it is not at all

7 clear that the exist -- that the prior research

8 applies to the new demographic and to the new

9 phenomena that we're observing.

10 Q And for people prospectively seeking puberty

11 blockers and hormone therapy for gender dysphoria,

12 those interventions are available through clinical

13 trials?

14 A Again, I don't think it's accurate to refer to --

15 the word access and the word treatment, you know,

16 assumes that -- come with several assumptions that

17 I don't think are valid. For example --

18 Q Well, I think I said interventions and available.

19 Do you disagree with those formulations?

20 A Yes, for next-door neighbor kinds of reasons. That

21 is it assumes a current situation that is allowed

22 for, but is not assumed in the procedure itself --

23 policy itself. If, for example --

24 Q Let's pull up the Finnish policy, just so we are

25 talking about the same thing.

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1 MR. STRANGIO: So that's Exhibit 7. Joel, you  
2 do that part; right? Thanks. Exhibit 7.  
3 A Again, this looks ouija boardish from over here.  
4 You talk and magic happens.  
5 Q Well, let's not go that far.  
6 Is this the document that you're referring to  
7 from Finland?  
8 A Yes, that looks like it.  
9 Q Okay. And I just want to go first to -- so this is  
10 under the current care in Finland, "In clear cases  
11 of prepubertal onset of gender dysphoria that  
12 intensified during puberty, a referral can be made  
13 for an assessment by the research group at TAYS or  
14 HUS regarding the appropriateness for puberty  
15 suppression." Did I read that correctly?  
16 MR. RAMER: Chase, can you zoom in a little  
17 bit?  
18 MR. STRANGIO: Yeah, sorry about that.  
19 A What you read was the content of that sentence, but  
20 interpreting what that sentence means requires a  
21 little more information -- well, chunks of  
22 significant information.  
23 That text indicates that that would be the  
24 process and that they are leaving permission for  
25 that to happen, except they leave permission for

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1 that to happen. Missing from that sentence is that  
2 neither -- I'm saying this in a backwards kind of  
3 way -- they are limiting the permission to do that  
4 to those two hospitals. But when that sentence is  
5 isolated, it seems to suggest that, you know, those  
6 two hospitals are engaged in such research  
7 programs, and I don't believe they are.  
8 It's, as I say, in the text of the policy it  
9 leaves permission for them to do that, but they  
10 have not set up the infrastructure to do it.  
11 Also --  
12 Q And you know that definitively?  
13 A No, I don't know that --  
14 MR. RAMER: Objection to form.  
15 A -- definitively.  
16 Q So they may have set up research program --  
17 proto -- excuse me, they may have set up research  
18 groups at the two hospitals listed?  
19 MR. RAMER: Objection to the form.  
20 A Again, some things are getting left out there. You  
21 know, when this first came through, you know, the  
22 best of my understanding in conversations with  
23 these people was that there was no -- that there  
24 did not then exist such a situation. But as, you  
25 know, we've tripped over several times, these

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1 things are changing quickly. People are making  
2 plans, and I -- you know, the exact details of  
3 every policy are not what I follow.  
4 So I necessarily need to leave room for the  
5 possibility that they have come up with one since  
6 the last time I happened to have heard from anybody  
7 there, but I -- they haven't received any kind -- I  
8 don't want to say they've received no publicity,  
9 they at least have not crossed my desk.  
10 Also, in the establishment of their policy,  
11 you know, the intention of the policy is put it in  
12 place and then the government structure is move on.  
13 If they conduct a study, find that, oh, it  
14 doesn't actually help these kids so we shouldn't do  
15 it anymore, the study wraps up and the rest of the  
16 ban remains in place. It leaves, again, in theory  
17 the opportunity for there being research, but it  
18 would not be fair to say that the situation is more  
19 limiting than it was meant to be.  
20 They leave a loophole such that it can be used  
21 if it can lead to potential changes in the future,  
22 but none of those -- there's nothing in it that it  
23 assumes that it will be this everliving alternative  
24 way to receive medicalized transition services. It  
25 just gives permission as just in case, but there's

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1 no indication that -- no reason to interpret it  
2 either as permanent or as current.  
3 Q So based on your understanding, those who had  
4 previously been receiving medicalized transition as  
5 adolescents can continue to receive it; is that  
6 right?  
7 A So far as I know, they haven't cut off people  
8 already in a medicalized pipeline.  
9 Q And that there is -- they have left open the  
10 possibility of future treatment through research.  
11 Is that fair?  
12 MR. RAMER: Objection to the form.  
13 A Again, for the same reasons as before, I hesitate  
14 to say treatment. They've left the door open  
15 through research, and then it will be open to the  
16 researchers, you know, whether to investigate  
17 whatever kind of interventions, changes, whether  
18 that counts as treatment, whether that cancels the  
19 type of treatment we're envisioning now is unknown.  
20 Q And that's the same as in Sweden; correct? They  
21 have not -- in Sweden they have not cut off  
22 treatment for those who had previously been  
23 receiving medicalized transition, as you call it?  
24 A That -- to the best of my knowledge, that's true,  
25 yes.

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1 Q And in Sweden they have left open the possibility  
2 that these interventions may be provided through  
3 research?  
4 MR. RAMER: Objection to the form.  
5 A Again, I would phrase it a different way, that they  
6 have -- that the regulation enables research. And  
7 then it's up to the researcher to know exactly what  
8 it entails, including the researchers not doing it  
9 at all.  
10 Q Is it your view that there is no research in this  
11 area happening at all in Sweden at this moment?  
12 MR. RAMER: Objection to the form.  
13 A I don't recall there currently being such a study,  
14 no.  
15 Q But you don't know?  
16 A Again, I just reflexively leave myself some wiggle  
17 room in that these things are changing quickly, you  
18 know, they are of enormous interest. And I do not  
19 take for granted that, you know, in the very recent  
20 past that things have changed.  
21 Q And you mentioned in our conversation Sweden,  
22 Finland and the UK, and then you also discuss  
23 France and Norway.  
24 But France and Norway would not be examples of  
25 places that have, quote, outright bans on

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1 treatment; is that right?  
2 A They have instead, you know, issued policy  
3 statements and advisories, you know, indicating  
4 their conclusion that medicalized transition is  
5 being overused too quickly, too often without  
6 sufficient consideration of less-risky  
7 alternatives, but they have not implemented -- they  
8 have not used the same policies strategies, I guess  
9 is the best term I can come up with, that the other  
10 countries have.  
11 Again, I'm not a medical policy expert. And  
12 each of these countries, you know, is run different  
13 ways, and they have different tools available to  
14 them -- each of these governments has different  
15 tools available to them in the way that they  
16 regulate medicine, all of which are, you know,  
17 entirely unlike the American lack of government  
18 control over -- in the U.S. I hesitate to call it a  
19 medical system, it's more like a medical industry.  
20 Q So these are all countries with medical systems  
21 that are fundamentally different from the U.S., you  
22 would say?  
23 MR. RAMER: Objection.  
24 A They have --  
25 Q What was that?

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1 A Yes, each of these countries has an entirely public  
2 healthcare system, you know, very -- relative to  
3 which the U.S. remains a big international outlier.  
4 Q Medicalized transition, as you call it, is  
5 available in France for adolescents?  
6 A It has not reached the level of -- it has -- the  
7 documents they've released have not suggested the  
8 level of restriction that other countries have.  
9 But I don't know, and I don't recall any reports  
10 discussing what portions of that, you know,  
11 reflect, you know, local political interests or, as  
12 I say, the methods by which each of these countries  
13 controls -- manage is a better word, manage their  
14 healthcare system.  
15 I don't know what the alternative strategies  
16 or controls the government had, how they get  
17 implemented or the extent to which they're issuing  
18 policy guidelines or advisories. You know, does  
19 that reflect a difference in their conclusion  
20 result of the science or just the political  
21 facility and speed with which they can produce such  
22 changes.  
23 Q So based on your knowledge, neither France nor  
24 Norway have outright bans on either puberty  
25 blockers or hormone therapy for adolescents with

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1 gender dysphoria?  
2 A It would be fair to say that current -- that  
3 although they have, you know, reversed course, you  
4 know, and they have scaled way back from the easy  
5 facilitation of medicalized transition, they  
6 haven't issued any language that suggests a yank as  
7 far back as strongly as the other countries have.  
8 Q Well, I'm not asking for such a descriptive answer,  
9 just simply yes or no -- well, I'll say it this  
10 way, just is medicalized transition, as you call  
11 it, banned in either France or Norway?  
12 A I'm not sure the question can be answered very  
13 accurately in just a yes or no, but I think it  
14 would be fair to say that the statements available  
15 are not as definitive as the ones in Scandinavia,  
16 for example.  
17 Q Going back to the --  
18 MR. RAMER: Hey, Chase --  
19 MR. STRANGIO: Yes.  
20 MR. RAMER: -- do you --  
21 MR. STRANGIO: This will be my last question  
22 on this topic, and then I was thinking we could  
23 break for lunch.  
24 MR. RAMER: Okay.  
25 MR. STRANGIO: Yeah, sorry. I'm not going to

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1 take us down -- I'm not going through every  
2 country, I promise, John. I was going to pull up a  
3 map, actually, of the whole world, and we're  
4 just --  
5 THE WITNESS: I was just going to say and now  
6 for Latvia.  
7 MR. STRANGIO: Yeah. If we could just pull up  
8 what I have premarked as Exhibit 6.  
9 BY MR. STRANGIO:  
10 Q And before it comes up, Dr. Cantor, you reference  
11 in your discussion of the UK something called the  
12 interim report from Dr. Cass; is that right?  
13 A Yes.  
14 Q And this is a document that Dr. Cass put together  
15 that informed -- is this the document?  
16 A Yes, it looks like it.  
17 Q And what is this document?  
18 A This was -- there were several documents that were  
19 released as a bulk. And I can't remember just from  
20 the particular date of this one exactly which one  
21 was which.  
22 This was part of the series of reports and  
23 documents where she was indicating the basic  
24 results of the systematic review and the  
25 comparisons against -- comparisons of its

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1 conclusions of what the science said with their  
2 what was then current policy and why those policies  
3 needed substantial revision.  
4 Q And then I just want to turn to page 9 here. And  
5 this is "A letter to children and young people"  
6 from presumably Dr. Cass. Is that a fair  
7 assessment?  
8 A So far as I can -- so far as I know, yes. Oh, I  
9 should also add that I don't think it's fair to say  
10 that this is a document that she put together.  
11 Q Fair enough.  
12 A This was a very -- she was a leader of a very  
13 large, very substantial, very talented team. You  
14 know, she provided the leadership, and she was  
15 selected specifically because she was close enough  
16 to the material in order to understand the science,  
17 what was going on in the basic field, but not so  
18 close as to being a part of it and receiving money.  
19 You know, she wasn't making her living from it  
20 either.  
21 Q Who is the -- who made up the team that she was  
22 leading?  
23 A Oh, goodness, I couldn't name the particular  
24 people. I couldn't name the particular people.  
25 Q You said it was a substantial team. How many

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1 people?  
2 A Oh, that's a good question. I remember running  
3 across, you know, lists in which they were  
4 provided, but I -- these were not -- as I say,  
5 these aren't people who are regularly part of the  
6 sex research community where I would have run into  
7 them over the course of my career.  
8 Q So you don't know exactly sitting here today the  
9 nature of the team that Dr. Cass led?  
10 A No, that's not fair either. The nature of the team  
11 were people, you know, with expertise and  
12 background in assessment and public healthcare  
13 policy. They were, you know, people with the  
14 appropriate backgrounds in order to conduct the  
15 review. But I don't recall their names, and  
16 they're not -- I would have to go through the names  
17 to double-check. I don't think any of them was a  
18 sex researcher.  
19 These are, you know, experts in medical  
20 outcomes and medical outcomes research and in its  
21 application to public healthcare policy.  
22 Q And so, on this page here in this interim report  
23 authored by Dr. Cass, the second paragraph she  
24 writes, "I have heard that young service users are  
25 particularly worried that I will suggest that

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1 services should be reduced or stopped. I want to  
2 assure you that this is absolutely not the case -  
3 the reverse is true. I think that more services  
4 are needed for you, closer to where you live."  
5 Is that correct? Did I read that correctly?  
6 A That's the sentence that she wrote. But, again, in  
7 its context -- when removed from the context  
8 surrounding it, it would seem to be saying  
9 something other than what it seems to say when put  
10 back into that context.  
11 I mean, you know, when isolated like that, you  
12 know, it almost sounds like she's saying that she  
13 wants to create more gender clinics so that people  
14 didn't all have to go to the same clinic in London.  
15 That's not what she was saying.  
16 In the context of the fuller report and all  
17 the other changes, she was putting as  
18 diplomatically as a person can in such a polarized  
19 cultural situation that the services -- that they  
20 need more services, but not necessarily the exact  
21 kind of services that they were requesting. I'm  
22 even being ambiguous about this myself.  
23 She wasn't saying that these people need more  
24 gender clinics, and we're going to put more gender  
25 clinics in more cities in order to facilitate your

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1 access to medicalized transition. She was  
2 recognizing that these people are, and they are,  
3 suffering from very substantial mental health  
4 issues that are getting unaddressed. Those are the  
5 services that she wanted to distribute, make more  
6 available. And she was recognizing that these  
7 people had great unmet needs, but that the --  
8 Q So is it your -- finish. I'm sorry.  
9 A But that medicalized transition was not necessarily  
10 the best, most-appropriate balance of the potential  
11 risks and potential benefits of the alternatives  
12 that were available to them.  
13 So she wanted better access to services that  
14 would help the kids, but one can't isolate that  
15 sentence in order to say that she was taking for  
16 granted that the service that they needed was  
17 medicalized transition.  
18 Q So is it your understanding that in England --  
19 excuse me, is it your understanding that in England  
20 they are not expanding access to services including  
21 medical services outside of the central gender  
22 clinic?  
23 MR. RAMER: Objection to the form.  
24 A I'm not sure I'm following your question. When she  
25 says -- in general where she says services, she is

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1 referring broadly to mental health services and  
2 social services and help because these kids are in  
3 distress.  
4 Q And excluding gender transition -- including  
5 medicalized transition services?  
6 MR. RAMER: Objection to the form.  
7 A Again, she's saying what she can say and leaving  
8 open possibilities acknowledging the large number  
9 of remaining unknowns. And that there are  
10 possibilities that things may change in the future  
11 as we get better evidence or if research produces  
12 something that we're not currently predicting.  
13 So she's using carefully crafted language, in  
14 my judgment, to leave open the possibilities, but  
15 to not make particular promises or to lead anybody  
16 down a -- to mislead people down a particular path.  
17 It is conceivable that, you know, future  
18 research may demonstrate that, okay, this is --  
19 that this may indeed, at least for some number of  
20 these cases, perhaps that it would be possible that  
21 medicalized transition might be the best option,  
22 but we can't take that for granted.  
23 What is very, very clear is that these kids  
24 are in genuine distress, and they're not receiving  
25 the supports they need for that distress. And

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1 although she didn't say it, the research is  
2 indicating that -- does suggest very, very strongly  
3 that these people are -- that very many of these  
4 youth are expecting that a physical gender  
5 transition would help them meet their psychological  
6 needs when it's not the best balance of potential  
7 risks and potential benefits -- risks and benefits  
8 for what they're aiming. So she --  
9 Q She didn't say that, you're saying that?  
10 A Correct. That would be -- that last part is my own  
11 assumption -- are my own words, you know. It is --  
12 you know, what she said is consistent with it, but  
13 I can't say that that is exactly what she's saying.  
14 I point out only that when take -- removed  
15 from the rest of the context around it, you know,  
16 it sounds like she's offering to expand medicalized  
17 transition, but that's not at all the full story.  
18 MR. STRANGIO: I think we can go ahead and  
19 stop there. How long, John, and Dr. Cantor, do you  
20 want for lunch?  
21 MR. RAMER: Over to Dr. Cantor.  
22 THE WITNESS: Oh, I'm from New York. I can  
23 eat while talking.  
24 MR. STRANGIO: I mean, same, but let's not do  
25 that for the sake of the court reporter, at least.

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1 So 40 minutes? Do you want to come back at ten of  
2 one Eastern Time?  
3 MR. RAMER: 12:50 Eastern sounds good.  
4 MR. STRANGIO: Okay. All right. See you  
5 then.  
6 (The deposition was recessed for lunch.)  
7 BY MR. STRANGIO:  
8 Q So coming back to a conversation we started a while  
9 back, Doctor, just for the sake of this line of  
10 questioning, so you're not a pediatrician; is that  
11 right?  
12 A Correct.  
13 Q And you don't have any clinical expertise in the  
14 treatment of children?  
15 A I don't know if it's fair to phrase it that way. I  
16 have no clinical experience in that I don't do the  
17 activity itself. But, of course, the effects on  
18 children and how it affects their development and  
19 their sexualities and so on I have a great deal of  
20 expertise in.  
21 Q So you don't have any clinical experience in the  
22 treatment of children?  
23 A Correct.  
24 Q And limited clinical experience in the treatment of  
25 adolescents?

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1 MR. RAMER: Objection to form.  
2 A Again, I don't know what limited means in the sense  
3 that, you know, it's -- most people have absolutely  
4 zero, and even a lot of the people who have  
5 experience with it have no experience in any other  
6 aspect of human sexuality and aren't able to  
7 perform a proper differential diagnosis.  
8 Q But, generally speaking, in your clinical practice  
9 I think you said lasted -- or, excuse me, generally  
10 speaking in your clinical practice, approximately  
11 5 percent of your patients were adolescents?  
12 A Those numbers are correct, yes.  
13 Q And do you have experience in pediatric research?  
14 A Yes, in the same sense that I published papers  
15 regarding children -- the assessment of children,  
16 the effects of development over the course of  
17 childhood, or for that matter, you know, prenatal.  
18 You know, I'm not a neonatologist, but by the  
19 same token brain development and what happens in  
20 the brain and during brain development even before  
21 birth is the very center of my background and  
22 expertise.  
23 Q And that's -- you've published original research in  
24 that regard?  
25 A I'm sorry, in which regard -- which of the --

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1 Q Excuse me, so you -- let me rephrase that.  
2 Have you done any research trials in the area  
3 of pediatrics?  
4 A What do you mean a research trial?  
5 Q What does that mean to you?  
6 A It doesn't mean anything to me.  
7 Q So I don't know what a --  
8 A Usually when somebody says trial they mean a  
9 clinical trial.  
10 Q Have you done any clinical trials in pediatric  
11 research?  
12 A No, I don't think so. Again, my hesitation is  
13 that -- just without scanning through my CV, just  
14 to make sure that there isn't one that I forget, as  
15 I say, you know, very often my involvement in  
16 projects is for the statistics or, you know,  
17 whatever technical piece that's relevant to the  
18 project that somebody on the team doesn't have.  
19 My favorite analogy is with accounting. It  
20 doesn't matter if you're doing the books for one  
21 kind of an industry or the other kind of an  
22 industry. You know the accountant, and you know  
23 when the accountant is wrong. And it doesn't  
24 matter if they're selling cars or beef.  
25 Q Got it. Have you reviewed the evidence base

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1 supporting clinical guidelines for pediatric  
2 conditions other than gender dysphoria?  
3 MR. RAMER: Objection to the form.  
4 A No, not that I recall.  
5 Q So are you aware of whether other treatment  
6 protocols for pediatric conditions are supported by  
7 randomized controlled trials?  
8 A Some are, some aren't. The question's a bit over-  
9 restricted in the sense that each of these  
10 questions requires several different aspects to be  
11 investigated at the same time and compared against  
12 each other.  
13 Of course, the most relevant of those are the  
14 risk-to-benefit ratio, and in the large majority of  
15 investigations that are pertinent to children, you  
16 know, there are relatively few instances that  
17 are -- that make good comparisons to gender  
18 dysphoria when they have to be applied to children  
19 or when we're talking medical interventions  
20 specifically to adolescents, not prepubescence.  
21 Q And are you aware as a general matter as to whether  
22 research is more limited in the area of pediatrics  
23 as compared with adult medicine?  
24 MR. RAMER: Objection to the form.  
25 A I've never undertaken such a comparison myself, but

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1 as a matter of, you know, how research -- how  
2 medical research is done, of course, I'm often  
3 involved in investigating or reviewing grants and a  
4 wide range of different topics.  
5 It would be an error to isolate research on  
6 adolescents and interpret it in -- it would be an  
7 error to interpret the number of studies conducted  
8 with adolescents as opposed to, you know, age 18  
9 and up or, you know, age of majority in whatever  
10 given state and jurisdiction, because very, very  
11 many illnesses are age linked. Young people have  
12 fewer diseases than older people.  
13 So the priority is often, on average, lower  
14 for children than adults, because on average  
15 they're healthier, you know, they haven't had the  
16 long-term effects of whatever situation they're in,  
17 whether it's smoking, obesity and so on.  
18 That isn't to say zero, and that isn't to say  
19 if you're young you're healthy, it's just that the  
20 difference of the people who suffer ill health, the  
21 young people are necessarily un -- less is a better  
22 word, less represented. So one has to be careful  
23 in not accidentally asserting a pattern that isn't  
24 associated with -- we can't take anything for  
25 granted.

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1 Q And are you aware of whether there are randomized  
2 controlled trials supporting medical treatment for  
3 precocious puberty?  
4 A I don't think that there have been randomized  
5 trials for it, but it's not a fair comparison. But  
6 it wouldn't be fair to compare precocious puberty  
7 and puberty blockers for precocious puberty with  
8 the use of those same drugs for gender dysphoria.  
9 Q Well, I'm not asking about gender dysphoria. I'm  
10 just saying just as to precocious puberty. There  
11 are -- you're not aware of any randomized  
12 controlled trials preventing medical treatments for  
13 precocious puberty?  
14 A I haven't conducted a search for them.  
15 Q So you're not aware of any?  
16 A Not offhand, no.  
17 Q What about randomized controlled trials supporting  
18 medical treatment for congenital adrenal  
19 hyperplasia?  
20 MR. RAMER: Objection to the form.  
21 A No, I can't think of randomized -- I can't think of  
22 a placebo-controlled randomized study. I would  
23 have to search to see if there have been randomized  
24 studies comparing different kinds of medicalized  
25 treatments with each other.

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1 Q But you're not aware of any offhand?  
2 A No, not offhand.  
3 Q Do you have any reason to know -- actually, let me  
4 rephrase that.  
5 Do you know if pediatric conditions frequently  
6 have the type of evidence supporting treatment as  
7 available evidence for treatment of gender  
8 dysphoria?  
9 MR. RAMER: Objection to the form.  
10 A Again, that's not really a meaningful comparison,  
11 because there are very few issues that have the  
12 same risk-to-benefit ratio. And the great majority  
13 of disorders, especially with youth, we're talking  
14 about, you know, objectively diagnosed.  
15 You can take a blood test and you either have  
16 it or you don't. It isn't a matter of, well, we'll  
17 talk about it and kind of decide and the child is  
18 telling you what their diagnosis is. So there are  
19 really very few like apples-versus-apples  
20 comparisons that can be made.  
21 So if you just kind of add up how many are  
22 there, again, the result is misleading, because the  
23 population of related disorders are so small to  
24 begin with.  
25 Q Well, let's take CAH, congenital adrenal

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1 hyperplasia, and just the medical intervention  
2 of -- surgical interventions on the genitals to  
3 make them conform to a more typical female genital  
4 presentation.  
5 Are you aware of any data supporting the use  
6 of that surgical technique on infants with  
7 congenital adrenal hyperplasia?  
8 MR. RAMER: Objection to the form.  
9 A I'm sorry, am I aware of any --  
10 Q Data on the efficacy of that surgical technique on  
11 treatment of infants with congenital adrenal  
12 hyperplasia?  
13 MR. RAMER: Same objection.  
14 A Not on mental health effects. There have been some  
15 case studies on, you know, the physiological  
16 outcomes, for whatever they're worth.  
17 You know, does the cosmetic end point match up  
18 with generic surgical success, I'm not aware of  
19 such studies for mental health effects.  
20 Q But it's possible, then, that that intervention  
21 causes harmful mental health effects on individuals  
22 with congenital adrenal hyperplasia. Is that true?  
23 MR. RAMER: Objection to the form.  
24 A It's certainly a fair hypothesis. In fact, there  
25 have been case studies, I don't remember if it's

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1 the name of the patient or the name of the author  
2 of the book, John Colapinto, who examined, you know  
3 a series of, you know, interventions that were done  
4 with children in order to make their physiology,  
5 you know, better match whatever -- oh, that was it.  
6 I'm thinking of the Reimer case. It wasn't a CAH.  
7 Never mind.  
8 Q So you don't know of any data studying the mental  
9 health outcomes of surgical interventions on  
10 intersex -- sorry, excuse me, on infants with CAH?  
11 A Not quantitative studies, no. There have been, you  
12 know, single case studies of people, you know,  
13 describing individual people, but not on -- not  
14 anything to which one would apply any statistics.  
15 Q Do you have concerns about the impact of that  
16 surgical intervention on infants with congenital  
17 adrenal hyperplasia --  
18 MR. RAMER: Objection to the form. Sorry.  
19 MR. STRANGIO: No, no. Sorry, that was not a  
20 good question. I'll rephrase.  
21 BY MR. STRANGIO:  
22 Q Do you have any scientific objections to the nature  
23 of the evidence base supporting the surgical  
24 interventions on infants with congenital adrenal  
25 hyperplasia?

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1 MR. RAMER: Objection to the form. Beyond the  
2 scope.  
3 A The question's kind of -- has a foot in science,  
4 and a foot in, you know, the related research  
5 ethics. And where it's properly science versus not  
6 is a legitimate conversation.  
7 I have concerns in the usual medical and  
8 clinical research concern that intervening puts us  
9 in a position of responsibility, especially when  
10 we're talking about, you know, surgical  
11 interventions.  
12 In all of medicine and medical researches -- I  
13 don't want to say it in Latin, because I'll  
14 mispronounce it -- but we're not going to -- we are  
15 bound not to do anything until we have very good  
16 evidence of its outcome.  
17 So intervening surgically or medically at all  
18 should be withheld until we have, you know, solid  
19 objective evidence to demonstrate benefit.  
20 So, again, I'm kind of -- you know, that's  
21 kind of scientific and kind of not. But I have  
22 concerns in that, you know, people were intervening  
23 medically and surgically without having a  
24 sufficient scientific research basis for dramatic  
25 intervention at all.

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1 Q But the law in this case explicitly exempts from  
2 prohibition those kinds of surgical interventions  
3 on infants with CAH. Are you aware of that?  
4 A Yes. But, of course, you know, my purpose and  
5 testimony isn't about the law. It's about the  
6 nature of science, what the science says. And how  
7 any organization wants to implement it is up to  
8 them. I don't mean either to attack or defend any  
9 statute.  
10 Q But you didn't weigh in as to the scientific base  
11 supporting those exempted interventions in this  
12 case?  
13 A I didn't intervene at all. I --  
14 Q I said weigh in.  
15 A -- do have -- not exactly sure what the difference  
16 is. But, again, for a specific statute, I haven't  
17 said anything.  
18 The only caveat I need to add is that it's  
19 very possible, although I don't have a specific  
20 recollection, it's very, very plausible that I  
21 would have spoken publicly about the application,  
22 again, of medical interventions in situations like  
23 the John Colapinto book about John Reimer -- Dan  
24 Reimer, John Reimer -- David Reimer, that was it --  
25 about medically intervene -- about engaging in

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1 medical interventions without first having  
2 objective evidence about its risk-to-benefit ratio.  
3 Q So I'm going to pull us to, just if you want to  
4 pull it up on your paper copy, page 46, paragraph  
5 106 of your declaration, which is Exhibit 1.  
6 A Got it.  
7 Q Maybe I should have had that. Okay. And this is  
8 at the bottom of the page, from 46 to 47. You  
9 write, "Biologically, the sex of an individual (for  
10 humans and almost all animal species) as male or  
11 female is irrevocably determined at the moment it  
12 is conceived. Terms such as 'assign' obfuscate  
13 rather than clarify the objective evidence."  
14 Did I read that correctly?  
15 A That's the content of the sentence, yes.  
16 Q What about infants with intersex traits?  
17 A What about it?  
18 Q Would this sentence apply to them?  
19 A Yes. However, there's subtle and profound -- or  
20 there's a distinction that can be both subtle and  
21 profound, you know, in how people are using the  
22 word sex, especially in this context and in today's  
23 context, about what it means as a definition of sex  
24 and in what ways, you know, exceptions can and  
25 should be made.

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1 There are relatively few characteristics for  
2 which there don't exist, again, details,  
3 atypicalities for which not everything can be taken  
4 for granted, but they do not -- but these are often  
5 examples that prove rather than disprove the rule.  
6 Q So what is the definition of sex that you're using  
7 here?  
8 A That is exactly one of those profound and subtle --  
9 distinctions that are both profound and subtle. In  
10 the context of gender dysphoria, it's a mistake to  
11 be saying that there is a definition of and that's  
12 that.  
13 And then with people picking either  
14 chromosomes or hormones or, you know, subjective  
15 experiences, sex itself in science would be -- let  
16 me say this a different way. People are confusing  
17 definitions with construct validity.  
18 In mathematics, we have a definition, and it  
19 will apply to the definition of the real numbers is  
20 the definition of the real numbers and there are no  
21 exceptions.  
22 In science, we have what's called construct  
23 validity. There's -- although we will use the word  
24 fact, there is no such thing as a fact. We only  
25 have the best explanation we have for the

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1 observations we've made. And it remains eternally  
2 possible for some future exception to be made, and  
3 we just haven't seen it yet. There is no such  
4 thing as settled science as popular as the phrase  
5 has become.

6 Sex is not like defining a real number versus  
7 irrational number versus an imaginary number for  
8 which there exists no exceptions. Sex is, again,  
9 in science or in statistics what we would -- what  
10 is the overlap amongst each of the pieces,  
11 including all of chromosomes and genetics and so  
12 on, all of which overlap and match the great,  
13 great, great majority of the time.

14 Sex is that overlap, not the individual  
15 ingredients that are put into the very -- the  
16 overlap. So the identification of exceptions do  
17 not break the rule.

18 In most situations, you know, at birth visual  
19 inspection of the genitals is, you know, a  
20 perfectly convenient, if I can use that term, way  
21 to go about, you know, identifying the sex of the  
22 kid, because it matches up with all of the other  
23 features in the great, great, great majority of  
24 instances.

25 But phrases such as the one that I was talking

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1 about here assigned at birth, well, if the mother  
2 got a sonogram when she was six months pregnant,  
3 she knew what the sex of the kid was going to be in  
4 the great, great, great majority of cases months  
5 before the birth happened.

6 So, as I say, but that -- so the presence of  
7 exceptions in a long complicated chain of events  
8 going from conception, and in some cases even  
9 before conception for some, you know, chemical  
10 interactions with the mother's body, you know,  
11 through life experiences, you know, some of them  
12 chemical, some of them biological, some of them  
13 social, again, these are a large, large complicated  
14 set of interrelated factors which are irrelevant in  
15 the great majority of the time, but we only have an  
16 issue when there is some exception.

17 So then we need to look more deeply into the  
18 situation in order to decide what, if anything,  
19 would be the most helpful to the person in  
20 question. But as I say, these are all questions  
21 about construct validity. And, you know, if I ask  
22 a person what a house is, they can give me, you  
23 know, a rough idea that will fit in the great,  
24 great majority of the time. But then we can ask,  
25 you know, "Well, is this an exception? Does this

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1 cave count as a house? Does this hut count as a  
2 house? Does a hotel that you're living in" -- I'm  
3 just making these up. And one can come up with,  
4 well, there can be certain exceptions to certain  
5 pieces of it, but what makes the house the house is  
6 the consistent overlap of each of these  
7 characteristics. But that there can be an  
8 exception to one of the useful rules of thumb that  
9 we use does not mean the overall concept -- that  
10 the entire structure itself is wrong.

11 Q Well, I'm not asking if it was right or wrong. And  
12 I think in some sense maybe you're trying to  
13 respond to why I'm asking, not what I asked,  
14 because I am just focused on these words in your  
15 declaration, "The sex of an individual as male or  
16 female."

17 What did you mean by "The sex of an individual  
18 as male or female"?

19 A The overlapping set of -- again, because of the  
20 context in which I wrote the sentence, it isn't so  
21 easy to just lift the sentence out from the others.

22 By the sex of the individual, I mean the  
23 overall set of characteristics, you know, ranging  
24 from and including, you know, the multiple  
25 biological features which are mostly -- again, it's

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1 the exceptions that are hitting my head -- that are  
2 mostly determined at the point of conception and  
3 the chromosomal combination.

4 Q Mostly, but not always determined at the point of  
5 conception?

6 MR. RAMER: Objection to form.

7 A I wouldn't say always. Again, I'm leaving room for  
8 there are certain, you know, chemical interactions  
9 between the chromosomes, the mother's body, the  
10 potential zygote and so on which can influence  
11 what's going on biologically. They're rarely of  
12 interest to very many circumstances, situations,  
13 but they exist.

14 Q And so, coming back to your previous discussion,  
15 you would say that overall sex is a set of --  
16 sorry, the overlapping set of characteristics,  
17 including multiple biological factors?

18 MR. RAMER: Objection to the form.

19 A Close. I would say it is the overlap --

20 Q Okay.

21 A -- amongst those biological features.

22 Q And what are those biological features?

23 A I don't know if they can be enumerated in full, but  
24 the primary ones are, of course, chromosomes,  
25 hormones. And biology, I'll say, from the neck

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1 down, you know, morphological form. And then  
2 neuroanatomy, anatomy from the neck up.  
3 Q And all of those biological features are part of  
4 sex?  
5 A Again, to say part of is to insinuate or the word  
6 kind of involves a way by which they go together.  
7 The best way I have -- I'm avoiding a mathematical  
8 term, factor analysis, but it is the overlap itself  
9 that forms the construct.  
10 Science and biology don't work like  
11 mathematics or law where you can write a definition  
12 and then make all of your decisions based on that  
13 definition and expect the result to be correct.  
14 That's not how science works.  
15 We give a best guess, and then we have to  
16 check to see if we were correct by making -- you  
17 know, designing a clever experiment to see if  
18 something might be an exception. And we remain  
19 tentative, because there remains always, at least  
20 in theory, the possibility of something being  
21 different.  
22 Q Then in paragraph 107 regarding gender identity,  
23 you write, "In science, a valid construct must be  
24 both objectively measurable and falsifiable with  
25 objective testing."

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1 Did I read that right, correctly?  
2 A Yes.  
3 Q What did you mean by that?  
4 A Well, again, I was pitting it specifically against  
5 trying to define or describe a concept according to  
6 something that is none of, that doesn't fit --  
7 well, specifically against claims of an inner  
8 sense.  
9 In science, there is no such thing as an inner  
10 sense. The purpose of science was to replace  
11 concepts based merely upon one's -- it's even more  
12 ephemeral than inner sense, it's what one says is  
13 their inner sense.  
14 Q In medicine, though, there are phenomena that are  
15 not objectively measurable beyond patient report;  
16 right?  
17 MR. RAMER: Objection to the form.  
18 A Yes and no. There exists situations where when  
19 it's low cost, consistent with other measures which  
20 are objective and for which there are no major  
21 risks, a convenient way to identify it could be  
22 through something relatively subjective.  
23 For example, you know, pain receptors in the  
24 brain, fine and important and very relevant for  
25 certain kind of research, but at the same time if

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1 there aren't enormous social pressures and enormous  
2 risks, we don't need to send to a brain scan  
3 everybody who comes in saying, "Doctor, my hand  
4 hurts."  
5 If, however, there are other situations where,  
6 you know -- there also exists situations like  
7 phantom limb pain. Now all of a sudden we're  
8 looking at an exceptional circumstance and we can't  
9 take for granted what the person says their  
10 individual experience is.  
11 So just saying that there exists exceptions,  
12 again, we can't from that say -- those exceptions  
13 don't disprove any such rule. There is a balance  
14 of risks and benefits.  
15 If it's low cost and pretty low risk, then we  
16 can afford, we have the luxury of just going along  
17 with the subjective self-report. If, however,  
18 we're talking about something -- if that subjective  
19 self-report is now in contradiction with the  
20 objective available data, now we have a question.  
21 We can't so easily take for granted the accuracy of  
22 that subjective self-report.  
23 Q But subjective self-report is often the basis for  
24 some medical interventions; is that correct?  
25 MR. RAMER: Objection to the form.

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1 A They exist in certain circumstances, which as I say  
2 are when they're low risk and not in conflict with  
3 objective information we do have.  
4 Q Do you think gender identity is real?  
5 MR. RAMER: Objection to the form.  
6 A That's a pretty philosophical question, if not  
7 outright Cartesian. Different people, of course,  
8 use that phrase, you know, to mean many different  
9 things in many different circumstances.  
10 So there are different senses in which that,  
11 you know, can be a useful descriptor, but only  
12 partially accurate. And there are situations in  
13 which, you know, people completely either misuse  
14 the term or misidentify their own experiences by  
15 application of the term because they don't have a  
16 better term. They haven't been exposed to a better  
17 term, or they're under some kind of social or other  
18 pressure to use that term or use another term, for  
19 that matter.  
20 So whether it exists really depends on what a  
21 person means and in what context.  
22 Q Do you mean -- excuse me, do you use the term  
23 gender identity?  
24 A The words will come out of my mouth in -- if we're  
25 in a context where what I'm trying to say is --

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1 will be well understood. If one is asking, you  
2 know, very detailed questions or very specific  
3 questions, then I'll use terms that, you know, more  
4 precisely and more accurately capture what a person  
5 is trying to say in using the phrase gender  
6 identity. It's even more --  
7 Q What are some of those terms that people might --  
8 that you think would be -- that would more  
9 accurately capture what people are trying to say?  
10 A Oh, it depends on whatever it is I can infer about  
11 what they're trying to say, again, by the context  
12 of it. Very many people use the word, for example,  
13 to mean -- to assert their belief that they would  
14 be happier in a different social role if people  
15 treated them in a different way.  
16 And the only -- and so they use the word  
17 gender identity, because it's now such a ubiquitous  
18 term. And in many parts of society, a lot of  
19 people feel pressure to just nod their heads and  
20 say uh-huh, even though they're not sure what it is  
21 exactly that they mean. And both of them are  
22 working from a series of assumptions, and each one  
23 is completely miscommunicating.  
24 Again, with my scientific hat on, that's not  
25 an acceptable situation. That's not how

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1 information can, you know, be assessed or  
2 self-corrected, and we can't help each -- we can't  
3 help people that way. In fact --  
4 Q How would -- excuse me. Go ahead, you can finish.  
5 A In doing -- probably one of the most common  
6 questions in doing any kind of therapy with  
7 anything is, "What do you mean by that?" A person  
8 says whatever emotion it is, or they feel whatever  
9 emotion they're feeling about, you know, their  
10 mother, their brother, their significant other,  
11 whoever it is, "What do you mean you hate love?"  
12 Like/dislike are confused by, and it's the what are  
13 the criteria that led you to use whatever word or  
14 concept is the important part.  
15 There are so many social, political and  
16 emotional pressures influencing gender issues now  
17 that, again, the term itself -- so many people are  
18 using the term in so many different ways, the term  
19 itself is not useful. People are using it for its  
20 cachet as much sometimes, if not more, for its  
21 accuracy.  
22 Q So let's say -- how would you describe someone who  
23 40 years ago, as a natal boy, let's say, said, "I  
24 am certain that I am a girl."  
25 What is that -- what would you describe that

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1 certainty of being a girl?  
2 MR. RAMER: Objection to the form.  
3 A Again, there are a couple of things embedded in  
4 that. It's that, you know, if a child says it, you  
5 know, a child being certain is not reflective of a  
6 child being certain, you know. Very often children  
7 phrase things, you know, in dichotomous or  
8 simplified ways, you know, just as part of their  
9 not yet having developed more subtle understandings  
10 of them.  
11 They will often assert things strongly because  
12 they feel emotionally strongly about them, so they  
13 use terms that are strong, even though that doesn't  
14 reflect actual certainty or evidence.  
15 It's an almost ubiquitous experience for gay  
16 men to say that they -- or including myself even in  
17 this particular one -- to have memories or feelings  
18 of not being a boy or I'm a girl on the inside.  
19 But even though they will have used those terms,  
20 it's not an accurate perception. It's a use of the  
21 only vocabulary that they have available to them  
22 with a child's perception and experience of it.  
23 Q What about an adult, 30 years ago none of the same  
24 social political context of now, who is a natal  
25 male asserts understanding or certainty of one's

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1 self as female?  
2 MR. RAMER: Objection to the form.  
3 A I'm almost self-conscious about I don't have to  
4 project I was there and listening to these people  
5 and in a -- you know, working in a clinic helping  
6 adults, you know, with gender dysphoria exactly to  
7 transition. And we had exactly this conversation,  
8 but not quite 30 years, closer to 25. And that's  
9 not how they described it. That's one of the flags  
10 that's -- you know, that increases my, you know,  
11 critical thinking ear, if I can mix my metaphors.  
12 25 years ago, people felt -- at least the ones  
13 that I was encountering, people felt comfortable  
14 admitting to their doubt and uncertainty and "I'm  
15 not so sure, and I want to try this out and see how  
16 it goes."  
17 Where the people coming into clinics now  
18 are -- the expression -- I'm losing the expression,  
19 are reporting to the test. They're -- you know,  
20 they think they know the right answer. And if they  
21 express doubt, then they won't be permitted to  
22 transition, so they don't express doubt. Or flip  
23 side that, you know, they're afraid that whatever  
24 services will be changed if they start describing,  
25 you know, I feel depressed or whatever negative

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1 emotions, so they don't tell the clinician.  
2 So people today are describing in much more  
3 dichotomous, black-and-white terms things that to  
4 those of us who have been in this field for a while  
5 recognize as different. People were willing to  
6 express their doubt a generation ago, and they're  
7 not now.  
8 Q What are you basing that on, your assertion about  
9 what's happening when people present themselves to  
10 clinics today?  
11 MR. RAMER: Objection to the form.  
12 A It's a combination of my own experiences, the  
13 reports of clinicians on both sides of the issues,  
14 those who, you know, basically see things, you  
15 know, with a critical eye that I apply, as well as  
16 clinicians who do not, you know, they also  
17 describe, you know, very, very dichotomous reports  
18 from their patients.  
19 But there's a huge generational divide. The  
20 clinicians I should -- the large, large majority of  
21 clinicians, even calling themselves advocates and  
22 activists, are all very young. They didn't  
23 experience these clinics, these patients, these  
24 populations, these problems, these difficulties  
25 before the social media age.

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1 This is all they know. They didn't notice a  
2 difference. So far as they're concerned, things  
3 have always been like this, and this is a permanent  
4 situation. It's only the people who have been  
5 working in this field over a longer period of time  
6 who are able to look back at it and say, this  
7 doesn't match the evidence. These are not the  
8 people on whom we gathered that evidence.  
9 The situations that suggest that, again, for  
10 the adults for whom this was a good idea, this is a  
11 different profile of what we were seeing before.  
12 And the research we gathered on that prior group  
13 does not automatically translate to the group that  
14 we're seeing now.  
15 Q You said your experience with patients presenting  
16 to clinics, but you aren't currently seeing  
17 patients in clinics, are you?  
18 A I'm not seeing the patients directly, no. Usually  
19 these would be either individual people coming to  
20 me, other clinicians coming to me to consult on  
21 whatever cases that they're seeing, the public  
22 discussions amongst, you know, groups fall along  
23 the spectrum. I should use a better term than  
24 spectrum, it's getting overused.  
25 Q What clinicians have been coming to you to express

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1 this?  
2 A I'm not sure what you mean by what clinicians. Are  
3 you asking for names?  
4 Q Yeah.  
5 A I don't know if I'm comfortable giving particular  
6 names. Usually these would be clinicians, again,  
7 from all over the world, you know, the U.S.,  
8 Canada, Europe, asking for input or a contrast or  
9 observations that they have known -- that they have  
10 noticed with subsets of their patients whose  
11 stories are different, or they don't know how to  
12 interpret the story because the models they used to  
13 use don't seem to be fitting. They're not getting  
14 feedback from their clients in the same way the  
15 clients they used to see.  
16 And, of course, you know, the clinicians and  
17 other sex researchers, you know, at a sex research  
18 and sex therapy clinic -- sex therapy conference  
19 that I'm a regular member of -- again, these are,  
20 you know, to me -- I've been going to these, I'll  
21 say it again, 25 years, you know, and these are  
22 common conversations among them. I feel like I  
23 need to add a caveat to that, too.  
24 Conversations have also become -- I don't know  
25 if quieter is the right term. People now are

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1 almost ironically less comfortable now talking  
2 about it than it used to be. When gender identity  
3 and sexual orientation were more stigmatized, you  
4 know, height of the HIV era, clinicians and  
5 scientists would pride themselves on resisting the  
6 social stigma in order to talk about the issues.  
7 The mantra of those days was silence equals death.  
8 It's reversed today. People now are often --  
9 I shouldn't say moderates, the middle 80 percent  
10 are less comfortable discussing the issue, because  
11 people want to ask questions where they feel there  
12 is a vagary or uncertainty. But they've seen so  
13 many examples, and there exists -- again, since the  
14 onset of social media especially -- so many  
15 examples of where people are getting pilloried not  
16 merely -- not because they said what somebody  
17 thinks is the wrong thing, but for saying,  
18 basically, that they agree, but not strongly enough  
19 that they're leaving out another opportunity to be  
20 still more extreme.  
21 Q What's an example of that?  
22 A I can really only talk about them in a family of  
23 examples where somebody will talk about a point  
24 about a particular study. Actually, Twitter  
25 probably is the best example, because --

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1 Q So you're referring to things that happened on  
2 Twitter, not in medical communities?  
3 A They --  
4 MR. RAMER: Objection to the form.  
5 A The situations don't divide quite so easily. It's  
6 because I'm, you know, a well-known member of that  
7 professional community that many of my Twitter  
8 conversations or Twitter threads are with other  
9 people that I know, again, from conferences,  
10 experts and the same background.  
11 So it's not the same kind of a conversation  
12 that, you know, a member of the lay public would  
13 have --  
14 Q Let me ask you this --  
15 A -- with another, you know, stranger member of the  
16 lay public. These would be two professionals and  
17 experts in a topic having a conversation mediated  
18 by Twitter, but it's not the same as just two  
19 random nonexperts having a conversation.  
20 Q Well, when you say -- when you referenced the  
21 examples of being pilloried, is that on Twitter?  
22 A It includes Twitter. And because the nature of the  
23 medium allows for it, you know, happens like --  
24 they happen louder and more often. But, no, these  
25 kinds of examples happen in every venue in which

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1 sex researchers have conversations.  
2 Q Do you have examples from outside Twitter of this  
3 happening?  
4 A Yes. Again, just about any conversation -- any  
5 social gathering -- social gatherings, for example,  
6 the social hours at conferences where usually, you  
7 know, it's at the end of the day, you know,  
8 whatever cocktail somebody is holding as people are  
9 just chatting and catching up since, you know,  
10 we're all old friends to each other -- most of us  
11 are old friends, you know, and then new batches of  
12 students and so on. But the conversations are now  
13 followed by who's listening. People are looking  
14 over their shoulders. People are adding phrases  
15 and caveats to their conversations that didn't used  
16 to be there.  
17 Two specific examples come to mind. Again,  
18 I'm running through my head, because I don't want  
19 to, you know, be inappropriately naming other  
20 people in the context where they wouldn't have me  
21 do. Both of these happen to involve Ken Zucker by  
22 coincidence.  
23 One would be a talk that he was giving at the  
24 Society for Sex Therapy and Research, SSTAR. And  
25 it was, you know, very much like other talks that

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1 Ken Zucker gives describing -- you know, sometimes  
2 he's giving talks about specific research that he  
3 was doing at the time on gender-dysphoric kids and  
4 their development.  
5 And then, you know, when he was involved in  
6 the DSM, you know, many of his talks were about the  
7 ongoing negotiations in the formation of the  
8 clinical criteria for the DSM-5 this was. But  
9 rather than just raise their hand or disagree and  
10 have a conversation, the conversation was how dare  
11 you say whatever it is that the person disagreed  
12 with. Unlike not very many years before, you know,  
13 it wasn't agree to disagree, it wasn't even just  
14 disagree. It was if all I have to do is declare  
15 myself offended and now you're not allowed to say  
16 it, which was anathema to sex research, sex  
17 research is what it is exactly because of sex  
18 researchers who were willing to say things that  
19 were unpopular amongst whatever other groups.  
20 Q But Dr. Zucker was the one giving the presentation  
21 in this example?  
22 A Yes.  
23 Q So he was speaking?  
24 A Yes.  
25 Q And you're describing the reaction of someone in

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1 the audience?  
2 A Yes, interrupting it, and essentially the word  
3 cancellation hadn't yet existed, but were so upset  
4 that they didn't think that he should be allowed to  
5 complete his thought discussion, or said another  
6 way, other people didn't have the right to hear it.  
7 Q When was this?  
8 A Early 2010s.  
9 Q And your other examples that you can think of are  
10 in social hours and conferences and on Twitter?  
11 A Those are, of course, much more common, because  
12 those, you know, kinds of conversations are, you  
13 know, so very much more common than an annual  
14 conference.  
15 And the other one -- specific one involving  
16 him, again, was at a conference -- that I was at a  
17 conference. I'm trying to remember the name of the  
18 researcher who did it. Again, Ken Zucker was  
19 giving a presentation. She had just finished hers  
20 and happened to have been sitting right behind me.  
21 And she was at full voice, you know, continuing to  
22 talk to herself, essentially, saying what she'd  
23 like -- well, didn't like about his conversation,  
24 until I finally turned around, you know, "Do you  
25 mind, you know, he's talking?"

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1 To which her response was, "Oh, I don't need  
2 to hear that."  
3 Q So coming back to your --  
4 A I couldn't --  
5 Q -- declaration, just to ground us there. You write  
6 in some sections about social transition in  
7 prepubertal children.  
8 What is your understanding of what social  
9 transition is?  
10 A I hesitate to say my understanding is -- I hesitate  
11 to say my understanding in that my understanding is  
12 that, you know, many people use that phrase to say  
13 many different things.  
14 So step number one is find out, you know, what  
15 it is the person I'm communicating with is trying  
16 to say even before we know if we're agreeing or  
17 disagreeing over any particular point.  
18 So my understanding is the range of different  
19 definitions and applications people use. And then  
20 if we're actually going to do any kind of research  
21 or assert any kind of meaningful fact, we start  
22 with, well, in this circumstance what do me and  
23 whoever it is that I'm talking to or I and whatever  
24 author of the paper I'm reading, how is it being  
25 used in this instance so we can be talking about

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1 the concept -- the relevant concept.  
2 Q So you don't have a singular definition of social  
3 transition that you use?  
4 A I don't think it's -- I don't think anyone could  
5 say that there exists a singular definition.  
6 Q And if you use it at various points in your  
7 declaration, is that based on how it's used in  
8 other places that you're referencing?  
9 A Again, I would have to look through each time I  
10 mentioned it, but I, as a matter of habit, try to  
11 either make it explicit how I'm using it or make  
12 explicit -- if I'm addressing somebody else's  
13 comment, then I do my best to make sure that it's  
14 clear that, you know, I'm using that person's  
15 definition or I'm addressing whatever that person's  
16 conceptualization is.  
17 Q And in your table of contents here pulled up on the  
18 screen, which I think it's IX.B.1, you have a  
19 section on what in the table of contents is,  
20 "Eleven cohort studies followed children not  
21 permitted social transition, all showing the  
22 majority to desist feeling gender dysphoric upon  
23 follow-up after puberty."  
24 A Yep.  
25 Q What does social transition refer to there?

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1 A There I was referring to Olson's study, recently  
2 out of California, which was the one exception  
3 among -- well, I shouldn't say exception among,  
4 exception in addition to that 11. Hers was the one  
5 study that followed kids who had already begun  
6 living as the other gender when they came into her  
7 clinic.  
8 So when she reported her results of relatively  
9 few of these kids having desisted by puberty,  
10 exactly the opposite as the first -- as the prior  
11 11, then, of course, I needed to cleave that, you  
12 know, there was an important difference between her  
13 one study and the other 11. That difference was,  
14 again using her words, I'm pretty sure, that they  
15 had socially transitioned.  
16 So in that context, the meaning was, you know,  
17 that the relevant definition was the one that made  
18 the sample she was reporting on so distinct from  
19 the others, from the other studies.  
20 Q Well, you describe all the others as following  
21 children who were not permitted social transition.  
22 So presumably there has to be a definition that  
23 applies to those 11 to know that children were not  
24 permitted to social transition.  
25 MR. RAMER: Objection to the form.

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1 A Again, that's not a definition. These were  
2 studies, you know, that predated the existence of  
3 the term. So the studies themselves didn't say  
4 these kids were not permitted to transition  
5 socially. These were studies that did what the  
6 studies did.  
7 And so, here we are, you know, sometimes  
8 decades later trying to summarize in an  
9 understandable, accurate, but still pithy --  
10 pithy's not the right word -- succinct or concise  
11 way to capture what is it that made, you know,  
12 these 11 different from that one.  
13 And the, you know, most applicable, shortest,  
14 easily -- hardest to misunderstand phrase would be  
15 social transition. But those papers didn't use  
16 that term at all, but they're meaningfully  
17 described with that term.  
18 Q So what does it mean that they're meaningfully  
19 described with that term, since you're the one who  
20 applied that term to these 11 cohort studies?  
21 A Oh, I think anybody reading the studies, the  
22 methods, the contents of them would very  
23 immediately come to the same conclusion that I did.  
24 As I say, I'm not asserting that there was a  
25 specific definition with a set of criteria that

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1 says fit or not fit. There really is no overlap  
2 between what the set of 11 did and what Olson's  
3 recent one did.  
4 It was an active part or it was an explicit  
5 part of the original 11 studies where the kids were  
6 not permitted to crossdress and adopt new names.  
7 They were, you know, encouraged to be as  
8 comfortable as possible in their biological selves,  
9 which is in -- which is exactly opposite to what  
10 Olson did, which was to let the kids -- I don't  
11 think it would be fair to say encourage, but --  
12 indulge probably isn't the right word either, but  
13 the way she, basically, described it is that, you  
14 know, the kids came in very often already living  
15 socially as the other sex.  
16 So because this was, you know, such a large,  
17 large difference between the original 11, we're not  
18 in a situation where subtle differences in wording  
19 or definition would change. You know, maybe one of  
20 these two 11 really were more like Olson -- the  
21 Olson study, the people -- the treatments, the  
22 therapies that kids who were coming into Olson's  
23 study were night and day different from the  
24 treatments being received by the first 11.  
25 Q So the first 11 you have on this page 51; is that

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1 correct? This table?  
2 A That sounds right. Just seeing what you have up  
3 there, that looks right, yes.  
4 Q And seven of those were from the 1970s and '80s?  
5 A Yes. As I say, this was ubiquitous, I would say  
6 since the '70s. It would be an error to say that  
7 all studies are old and, therefore, wrong.  
8 Q I'm just not asking you to say whether they're old  
9 or not. I'm just asking a factual matter whether  
10 seven of them were published in the 1970s and the  
11 1980s?  
12 A That looks right, yes.  
13 MR. STRANGIO: I'm happy -- I can keep going.  
14 It is an hour now if you want to take five.  
15 MR. RAMER: Yeah, why don't we take five.  
16 MR. STRANGIO: Okay.  
17 (A recess was taken.)  
18 BY MR. STRANGIO:  
19 Q So I'm going to fill in this exhibit, which is  
20 one -- I'm going to take us to another section. So  
21 we're in -- here on paragraph 135, page 59 of your  
22 declaration, Doctor. It's at the bottom of the  
23 page discussing what you're referring to as  
24 adolescent childhood -- sorry, "Adolescent-Onset --  
25 A Yep.

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1 Q -- Gender Dysphoria." And so, you write, "This  
2 group typically presents in adolescence, but lacks  
3 the history of cross-gender behavior in childhood  
4 like the childhood-onset cases have. It is that  
5 feature which led to the term Rapid Onset Gender  
6 Dysphoria (ROGD)," citing to Littman 2018.  
7 Did I read that correctly?  
8 A Yes, that sounds correct.  
9 Q And rapid-onset gender dysphoria is not a  
10 recognized diagnosis; is that right?  
11 A Not in a diagnostic manual itself, but that  
12 shouldn't be interpreted to mean that the  
13 phenomenon doesn't exist.  
14 Q And the paper that you cite, Littman 2018, was  
15 corrected as you note; right?  
16 A There was a change to it, but nothing that  
17 meaningfully altered any of its actual conclusions.  
18 Q On footnote 5 you reference, "After initial  
19 criticism, the publishing journal conducted a  
20 reassessment of the article. The article was  
21 expanded with additional detail and republished.  
22 The relevant results were unchanged."  
23 Is that a correct reading of the footnote  
24 there?  
25 A Yes.

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1 MR. STRANGIO: If we could, Joel, pull up  
2 Exhibit 8.  
3 Q Does this appear to be the notice of republication  
4 of the Littman 2018 article?  
5 A It appears to be, yes.  
6 Q And at the top it says -- and I can zoom in so we  
7 can look more closely -- "After publication of this  
8 article" -- sorry, do you see where it begins that?  
9 A Yes.  
10 Q And then going down to the next paragraph -- oh,  
11 sorry. Under the second part of this corrected  
12 republication, there's a heading that reads,  
13 "Emphasis that this is a study of parental  
14 observations which serves to develop hypotheses."  
15 Do you see that?  
16 A Yes.  
17 Q And then here at the top, about four lines down,  
18 "Rapid-onset gender dysphoria, (ROGD) is not a  
19 formal mental health diagnosis at this time. This  
20 report did not collect data from the adolescents  
21 and young adults (AYAs) or clinicians and therefore  
22 does not validate the phenomenon."  
23 Did I read that correctly?  
24 A That's what that text says, but it's very difficult  
25 for a person to know what that means and what it

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1 doesn't mean without having a better idea of how,  
2 you know, science publishing works.  
3 Q Well, so you noted that there was correction to the  
4 article, but did not reference that ROGD is not a  
5 formal mental health diagnosis.  
6 Why didn't you mention that?  
7 MR. RAMER: Objection to the form.  
8 A It's not pertinent to the decision or question --  
9 to the decision -- to the clinical question and the  
10 pertinent decisions that followed from it.  
11 In the situation, the whole point of the  
12 current difficulty is that the profiles of the  
13 people coming to clinics and expressing profound  
14 often discontent that they do not match what is in  
15 the existing manuals and on which our existing  
16 knowledge base sits, that's the point.  
17 Whether this new profile of person is better  
18 helped and better served by ROGD as a diagnosis  
19 unto itself, or if they actually are suffering  
20 other kinds of problems but we're just noticing the  
21 ROGD part of it because it's what they're saying on  
22 its face value, or if, you know, the previously --  
23 you know, the well-characterized distinction  
24 between the adult-onset gender dysphoria -- and  
25 adult-onset gender dysphoria, if this is now just a

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1 new way of expressing one of those, well, we need  
2 to know that in order to know what to do with these  
3 kids. That this new presentation is not in the, in  
4 this case DSM is usually what people are referring  
5 to, that's the whole point.  
6 This is new and we don't know what to do with  
7 it. Therefore, the medically and clinically  
8 appropriate thing to do is nothing until we have a  
9 better idea of what the potentials are, the risks  
10 and benefits are.  
11 When we're talking the removal of healthy  
12 functioning tissue, that's a method of last resort  
13 until we've exhausted the other alternatives which  
14 don't involve as much potential harm.  
15 If, you know, after we've exhausted the other  
16 possibilities and realize, yeah, this really is the  
17 best balance of the potential risks and benefits,  
18 okay, let's go ahead. But that entire set of  
19 questions was skipped.  
20 We don't know if this is an independent  
21 phenomenon, a new subset of an old phenomenon, and  
22 if it is which phenomenon. These are people coming  
23 in, you know, in great emotional distress. Okay,  
24 but that doesn't mean that it's automatically what  
25 it is that they're saying out loud. We can't take

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1 for granted that they're like one of the other  
2 forms of gender dysphoria.  
3 Q But in this paper, they're not saying it out loud;  
4 right? It's their parents?  
5 A Oh, in studies of youth that is -- that's very  
6 common. That is -- as I say, it's difficult to  
7 interpret that sentence once lifted out of, you  
8 know, the rest of how this research is done.  
9 Interviewing parents and caregivers and so on is a  
10 very, very routine method of studying minors.  
11 Q Exclusively interviewing parents and not the minors  
12 themselves is routine?  
13 MR. RAMER: Objection to the form.  
14 A For one particular study, absolutely. It's when  
15 asking a question, you know, it is exquisitely,  
16 exquisitely rare for any one study to be -- to  
17 answer -- you know, to answer any question.  
18 Usually what we need, and the only way we know  
19 that we're on the correct path that we have the  
20 correct answer is when several different  
21 researchers working independently using different  
22 kinds of methods keep coming to the same result  
23 over and over. That's when we can be confident.  
24 So in any research investigating or that's the  
25 pursuit of any question including this one, we need

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1 studies that talk to the kids, that talk to the  
2 parents, that talk to their psychologists, that  
3 talk to the physicians and other studies that don't  
4 talk to a person at all and stick to objective  
5 measures, you know, of whatever is appropriate to  
6 the question.  
7 So this one particular study was the one that  
8 interviewed parents. It is neither the beginning  
9 nor the end. Is it one piece of the puzzle and an  
10 important piece when we need, you know, and it goes  
11 in the pattern of all the others.  
12 So it's that, you know, contribution one piece  
13 at a time, yes, that is absolutely a routine method  
14 for investigations studying minors.  
15 MR. STRANGIO: If we could go back, Joel, to  
16 Exhibit 1. Sorry, Joel, did you hear that, Exhibit  
17 1? Thanks.  
18 BY MR. STRANGIO:  
19 Q Okay. Still on paragraph 135, you write after  
20 reference to the Littman article, "The patterns" --  
21 and this, let me -- I can zoom in for you, although  
22 I think you have this in front of you, Doctor.  
23 "The patterns reported by Littman have now  
24 been independently replicated by another study  
25 which also found it to be a predominantly female

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1 phenomenon, associated with very high rates of  
2 social media use, among youth with other mental  
3 health issues, and in association with peers  
4 expressing gender dysphoria issues." Citation to  
5 Diaz 2023.  
6 A Yes.  
7 Q Is that right?  
8 A That reading of the text is correct, yes.  
9 Q And if we can pull up -- well, let's see if we can  
10 do this without pulling up the exhibit for the sake  
11 of our limited technological skills.  
12 Are you aware of changes to the Diaz article  
13 subsequent to publication?  
14 A Yes, I am.  
15 Q And you're aware that the second author of the  
16 publication, Michael Bailey, has since made public  
17 that the paper has been retracted?  
18 A Yes. Of course, I need to add the caveat that arm  
19 of the drama happened after I submitted this. So  
20 it wasn't -- you know, I didn't have that knowledge  
21 when I wrote and submitted it. But, yes, I know  
22 that that's happened in the interim.  
23 Q So the article that you cite further the prop --  
24 the article that you cite for the proposition that  
25 the patterns reported by Littman have now been

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1 independently replicated was retracted?  
2 A Again, there are some nuances in that. There are  
3 some nuances in that. The paper wasn't -- the  
4 basis of the retraction of the paper, which is  
5 itself now a means of enormous controversy, was not  
6 actually about whether the contents were accurate.  
7 No one has, you know, presented any demonstration  
8 that the results that they reported were incorrect.  
9 So to the extent that one is actually seeking  
10 the truth in that if one wants to know what's going  
11 on, as best as we could tell with these kids, you  
12 know, the conclusions they came to are perfectly  
13 valid and, again, exactly the same. They, you  
14 know, completely independently come to the same  
15 conclusion as the Littman paper.  
16 To the best of my knowledge, the nature of the  
17 controversy, I guess I can call it, which led to  
18 the formal retraction was -- oh, goodness -- was  
19 the database was pre-existing. The nature of the  
20 data were already collected by the time -- I guess  
21 it was Bailey became involved.  
22 And in research ethics, there are different  
23 criteria that they use for pre-existing databases  
24 versus, you know, actively going and recruiting  
25 people in order to participate in a study or

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1 whatever.  
2 The way that these data came, it was  
3 ambiguous. There are, you know, different groups  
4 that have different policies and different  
5 principles for, you know, under what circumstances  
6 should people have undergone how thorough of an  
7 informed-consent process.  
8 In this particular one, the relevant  
9 guidelines would be those of the publisher itself,  
10 Springer who publishes the journal that this was  
11 printed in.  
12 The policy of Springer is that it was up to  
13 the discretion of the editor in chief. And the  
14 editor in chief which said that, yep, nope, fine  
15 with him.  
16 However, after the publication of the article,  
17 you know, the nature of it and that people didn't  
18 like the conclusions that it came to started a --  
19 what I can only call a campaign to have it declared  
20 unethical, because they don't think that the  
21 editor's discretion was what they wanted it to be.  
22 So, again, that became, you know, whatever  
23 pressures. And then it goes, you know, behind  
24 closed doors, and I don't know what's going on.  
25 And then the publisher ultimately decided to --

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1 that the paper should be officially retracted. But  
2 there were never any allegations, and there were  
3 never any conclusions that the content or the  
4 conclusions themselves were in error.  
5 So whether that should be -- so does that  
6 count or does that not count? It's hard for me to  
7 come to any conclusion that people are going to  
8 accept or reject the contents of that paper  
9 according to whether they accept or reject its  
10 implications. The content of the paper, however,  
11 has not been in question.  
12 Q But just as a factual matter, in this paragraph one  
13 of the papers was corrected and one was retracted?  
14 A I don't think -- such a characterization, again,  
15 just kind of insinuates a situation that is the  
16 opposite of the truth.  
17 The correction -- again, in general publishing  
18 a correction is the formal name of a post-  
19 publication change. It is -- you know, but in the  
20 context where people are, you know, liking or  
21 disliking a finding, the word correction is getting  
22 used to imply that one of the conclusions was wrong  
23 or something in it was incorrect, which is not the  
24 case.  
25 The content that was changed to Littman was

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1 adding detail. None of the conclusions changed, no  
2 errors in it were found. It's the decision was,  
3 well, add the necessary detail in order to  
4 demonstrate that nothing was skipped because this  
5 particular audience isn't going to take anything  
6 for granted.  
7 So she added the detail, but the nature of  
8 editorial publishing is that such changes are  
9 called correction. So, again, to just take that  
10 sentence out is to -- is easily mistaken as an  
11 assertion that something was incorrect.  
12 Same with the Diaz paper. To call it a  
13 retraction without the, you know, details of what  
14 led to the retraction is to insinuate or to kind  
15 of, you know, leave a reader or listener the  
16 impression that there was something wrong, that  
17 there was an error in the conclusions of the paper,  
18 and so its conclusions ought not to be given any  
19 weight.  
20 That's not the case. The conclusions were  
21 never in question, and nobody's changed any of the  
22 conclusion -- nobody's asked for any changes to the  
23 conclusions or demonstrated that there was an  
24 error.  
25 People have been -- there were people who were

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1 upset and protesting about -- well, again, their  
2 motivations are, you know, pretty -- are relatively  
3 clear, but the content -- the rule that was being  
4 contested was the method and amount of disclosure,  
5 you know, of the people who participated in the  
6 study. But there was never any question in the  
7 accuracy of the study itself.  
8 Q Is your view that it was only retracted because of  
9 external pressures?  
10 MR. RAMER: Objection to the form.  
11 A I haven't seen any evidence, and I haven't -- I  
12 don't think I've heard any accusations otherwise.  
13 Q So you think that the journal just retracted it  
14 because of external pressures, not concerns about  
15 the informed consent as --  
16 A The journal didn't retract it. The publisher did.  
17 Q Excuse me, the publisher retracted it out of  
18 concerns about a lack of informed consent, that was  
19 not a true reason?  
20 MR. RAMER: Objection to the form.  
21 A I don't think the situation breaks down quite that  
22 way. And it's essentially what the publisher  
23 themselves said. They indicated that they were  
24 receiving those kinds of communications. There  
25 was -- I'd have to go back and read the original

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1 letter they sent. The policy that they have, you  
2 know, it was entirely explicit that it was left up  
3 to editor's discretion. So essentially they as  
4 publisher overturned the editor's use of that  
5 discretion.  
6 Again, I don't think any of that is ambiguous.  
7 And I'm not aware of anyone anywhere in that  
8 pipeline -- at least the parts, you know, to which  
9 I'm privy, I've not seen any communications or  
10 evidence or discussion otherwise.  
11 Q Going to page 62 -- uh-oh, what have I done? So  
12 beginning on page 62 of your declaration, you  
13 distinguish between suicide and suicidality; is  
14 that right?  
15 A Yeah, again, I hesitate to say that, you know, I  
16 distinguish. I'm just, you know, orienting people  
17 to the proper uses of the vocabulary. So people  
18 who are, you know, not psychologists, you know,  
19 reading this don't accidentally mistake one to mean  
20 the other, which, again, especially in this context  
21 very many groups are actively doing.  
22 Q So, I mean, in essence you note that they're  
23 distinct clinical phenomena; is that right?  
24 A I know that these are distinct phenomena, yes.  
25 Q You note, sorry. I know that you know that. You

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1 note?  
2 A Oh, I note that, yes.  
3 Q I don't actually know, so --  
4 A And perfectly legitimately, the public doesn't.  
5 That's not their job. You know, this isn't the  
6 kind of stuff that people discuss. And that's what  
7 leads so many people to misunderstand the content  
8 of these studies, especially when things are being  
9 lifted out of context.  
10 So in order to understand the context of these  
11 studies, you know, I have to start out with, as I  
12 say I do, here are the definitions. Here's how I'm  
13 going to use them. If you read these other, here's  
14 how they use them. Which one we use, I don't care,  
15 but as long as we're all using the same one, we can  
16 have a productive conversation.  
17 Q And so, understanding they're distinct clinical  
18 phenomena, you would agree that both should be  
19 clinically addressed?  
20 MR. RAMER: Objection.  
21 A Oh, yes, absolutely.  
22 Q And that reducing suicide and reducing suicidality  
23 are both positive outcomes?  
24 A Yes, absolutely. The difficulty that society comes  
25 to is that it is exactly because it is part of

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1 these being such different phenomena that the way  
2 to deal with them effectively is very different.  
3 So --  
4 Q Understood.  
5 A -- not merely a matter of -- you know, using  
6 suicide when we mean suicidality, that's not  
7 merely, you know, exaggerating. It's failing to  
8 help get the right kind of help to the right group  
9 of people. And so, you're disadvantaging them  
10 both. And everybody's harmed or failed to be  
11 helped.  
12 Q In paragraph 142, and this is on page 63, you  
13 write, "Social media voices today loudly advocate  
14 'hormones-on-demand' while issuing hyperbolic  
15 warnings that teens will commit suicide unless this  
16 is not granted."  
17 Did I read that correctly?  
18 A Yes, that's the content of my sentence.  
19 Q What are hormones-on-demand?  
20 A With minimal assessment consideration of  
21 alternatives, it's removing whatever safeguard one  
22 can find an excuse to remove.  
23 This is another one of the differences that  
24 have changed over time, which is relatively  
25 apparent to those of us who have been in this field

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1 for long periods of time and have watched the  
2 removal of safeguards as opposed to people who have  
3 recently come into the field and are only aware of  
4 the current status and don't realize that this is a  
5 change.  
6 So people are often referring to, you know,  
7 history's long-standing criteria. No, the current  
8 criteria are not long-standing at all. These are  
9 brand-new and untested.  
10 The subset of studies which suggest success  
11 use the relatively high standards that used to be  
12 in place at that time. Today people have removed  
13 the real-life testing requiring months, years in  
14 some cases, of psychotherapy and expect still to  
15 get the same results.  
16 Q There's no citation on this sentence about  
17 hormones-on-demand; right?  
18 A Correct. And that's also why I put it in quotes.  
19 I'm using it as a general description to capture  
20 the basic idea of what's going on.  
21 Q So that's not based on any specific practice?  
22 MR. RAMER: Objection to the form.  
23 A No, that's not true either. It's the -- you know,  
24 the term itself is, you know, my own expression in  
25 order to describe the situation. But the situation

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1 that I'm describing is, you know, quite concretely  
2 real.  
3 As I say, it's the -- I'm referring very  
4 specifically to the removal of the safeguards that  
5 were in place when the available data were first  
6 gathered. And the reason why, that just because  
7 we're -- that after removing those safeguards and  
8 after removing the assessment procedures and so on,  
9 that expecting different -- expecting the same  
10 result after changing the -- after removing those  
11 safeguards is what makes the current situation an  
12 experiment, you know, without the knowledge of the  
13 experimentees.  
14 And I use the word hormones-on-demand to refer  
15 to situations where -- and to clinicians who  
16 believe that asking for hormones or medicalized  
17 transition services is sufficient, and from that  
18 point forward, the clinician's predominant duty,  
19 now with only very rare exceptions, to find ways to  
20 provide them. Rather than to accept it as one of  
21 the possibilities, let's try the less potentially  
22 risky ones first.  
23 Q And what -- who are the social media voices?  
24 A Oh, again, the ones whom I happen to run into  
25 regularly. There's certainly no shortage of them,

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1 only because his name is forefront of my mind for  
2 the moment, would be, for example, Jack Turban.  
3 Q So you would consider Jack Turban to be a social  
4 media voice?  
5 A Yes, I think it would be fair to describe him that  
6 way. I don't want to be unfair to him either. I  
7 wouldn't say he's limited to being a social media  
8 voice.  
9 Q So you mean clinicians on social media?  
10 A I would include clinicians on social media.  
11 Q And you think that non-clinicians on social media  
12 are relevant to your assessment of current clinical  
13 practice?  
14 MR. RAMER: Objection to the form.  
15 A No, I wouldn't say that either. How I use that  
16 phrase, and how I would still use that phrase,  
17 really, is that that is the medium through which  
18 one would run into, you know, such voices. I mean,  
19 if one is looking to find, you know, how these  
20 ideas are getting communicated, they're largely  
21 getting communicated through social media.  
22 It is hard to avoid the observation that it  
23 was the onset of social media that changed, you  
24 know, the public perception and treatment,  
25 including professional treatment, of gender

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1 dysphoria is one of very many, very profound  
2 changes that all started with identical timelines.  
3 Among them is this sudden and exquisitely rapid,  
4 literally exponential increase in rates of mostly  
5 adolescents, mostly biological female reporting  
6 gender dysphoria.  
7 It's unfortunate, it is not helping that  
8 generation at all. Gender dysphoria -- or that  
9 enormous exponential increase in gender dysphoria  
10 is only one of several dysphorias, all of which  
11 have exponentially been increasing since the onset  
12 of social media.  
13 Q What are the other dysphorias?  
14 A The other major ones are reports of depressions,  
15 anxieties and, again, suicidality.  
16 Q On page 91, paragraph 204 -- Joel never should have  
17 given me control of this.  
18 A Would it be inappropriate for me to say, oh, this  
19 sounds like a significant other kind of a comment?  
20 Q Okay. 204. Here, Doctor, you are talking about  
21 sterilization without proven fertility preservation  
22 options. You write, "Clinical guidelines for the  
23 medical transition of gender among children include  
24 the need to caution and counsel patients and  
25 parents about what are euphemistically called

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1 'options for fertility preservation.'" And then  
2 you cite the Endocrine Society Guidelines.  
3 Is that -- did I read that correctly?  
4 A That's that one sentence, yes.  
5 Q Shouldn't clinicians counsel patients about options  
6 for fertility preservation?  
7 MR. RAMER: Objection to the form.  
8 A Again, that's why I'm pointing it or was trying to  
9 emphasize that what I'm pointing out is that  
10 they're doing that euphemistically, where the term  
11 they're using is sterilization, which is  
12 essentially guaranteed for somebody who goes from  
13 puberty -- or halted puberty with puberty blockers  
14 to cross-sex hormones.  
15 The very phrase "fertility preservation" works  
16 under the assumption that you were fertile in the  
17 first place. And the sequence of blocking puberty  
18 and taking prepubertal gonads and putting them on  
19 cross-sex hormones is the prevention of  
20 ever-developing fertility. It's not preservation.  
21 That's an adopting of the term -- adoption of  
22 a term if, for example, a man with testicular  
23 cancer is going to undergo chemotherapy, which,  
24 again, would, you know, interfere with, if not  
25 outright destroy, his ability to produce viable

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1 sperm. That would be a person who is fertile, and  
2 we are trying to maintain, we're trying to preserve  
3 his fertility. To say that --  
4 Q So I understand that. This is a reference to the  
5 clinical guidelines for medical transition  
6 generally.  
7 So taking aside puberty blockers, there are  
8 fertility preservation options for persons who  
9 undergo hormone therapy, are there not?  
10 MR. RAMER: Objection to the form.  
11 A Again, that to me is why I referred to this as  
12 you've -- as a euphemism. There exists a range of  
13 interventions and a range of their harms.  
14 To pick the mildest phrase which describes the  
15 mildest harm, and then generalize that to apply to  
16 the entire range where the controversy is at the  
17 other extreme where there is again sterilizing  
18 these children, you know, we end up with a  
19 situation where the terminology is being used in  
20 accordance with the person's political or other  
21 views rather than my automatic preference as a  
22 scientist make the word -- make the phrase precise  
23 and accurate.  
24 And fertility preservation is amongst the  
25 terms that is, again, being a euphemism and not

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1 accurately describing the risks and potential harms  
2 in a way that would allow for a legitimate and  
3 meaningful calculation of the risk-to-benefit  
4 ratio.  
5 Q But you don't think that counseling a patient that  
6 there are no options for fertility preservation in  
7 some instances, and then counseling a different  
8 patient that there are some options for fertility  
9 preservation in other instances is an appropriate  
10 way to describe a range of medical intervention?  
11 MR. RAMER: Objection to the form.  
12 A I haven't seen a document that does that. I don't  
13 believe the Henbury policy did that. It consisted  
14 only of the use of the mildest terms.  
15 I also think it's an error to use, again, an  
16 all-encompassing term like patient. We are talking  
17 a prepubescent child and having an adult  
18 conversation about whether they want to have  
19 children. That conversation is not comparable in  
20 any meaningful way to a 30-year-old adult male,  
21 with in this example testicular cancer, who is able  
22 to come to an adult brain decision over children,  
23 not children, the potential for his own future  
24 fertility.  
25 Asking a prepubescent that is using a global

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1 all-encompassing term like patient is another  
2 example of obscuring the most, you know, severe and  
3 dramatic of these situations using exactly the same  
4 term that we should use, you know, in describing  
5 the most mild of the range of issues and the  
6 risk-to-benefit ratio.  
7 Q In that paragraph you write, "The decision to  
8 undergo medicalized transition also represents the  
9 decision never to have biological children of one's  
10 own."  
11 Do you think that might be the most extreme  
12 interpretation of a range of potential outcomes?  
13 MR. RAMER: Objection to the form.  
14 A Oh, again, the same. When somebody is giving one  
15 extreme, I'm pointing that out to -- you know, I'm  
16 red flagging it by pointing out the missing part of  
17 the extreme, which requires me to name the missing  
18 part of the extreme. The whole point is that this  
19 is a wide range.  
20 Q But someone who, say, undergoes a double mastectomy  
21 can still have biological children of one's own?  
22 MR. RAMER: Objection to form.  
23 A The situation, at least in theory, can exist. But  
24 there are no reliable numbers, I think either in  
25 the U.S. or Europe, about the proportions and

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1 overlap of, in your example biological women,  
2 undergoing mastectomy versus cross-sex hormones  
3 versus puberty suppression.  
4 Of course, you know, sterility and decisions  
5 about the sterility being made by a prepubescent  
6 brain comes from people who are on puberty blockers  
7 pretty much as puberty starts and then going on to  
8 cross-sex hormones.  
9 Q So you're describing a subset of the people who  
10 undergo medicalized transition in this sentence?  
11 MR. RAMER: Objection to the form.  
12 A Hang on, I was still stuck on the prior part.  
13 Again, the sterility is for people who are on  
14 puberty blockers followed by cross-sex hormones.  
15 A biological female put on puberty blockers  
16 and then put on cross-sex hormones doesn't develop  
17 the breasts for which a double mastectomy would be  
18 required in the first place.  
19 Q So, I'm sorry, your phrase undergoing a medicalized  
20 transition only refers to people who go from  
21 puberty blockers to gender-affirming hormones?  
22 MR. RAMER: Objection to the form.  
23 A I didn't mean my sentence to be a complete review  
24 of, you know, several different potential  
25 combinations of the several different variables.

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1 Again, my purpose was to demonstrate that it  
2 is inappropriate to the point of misleading for a  
3 professional medical society of all groups to use  
4 only the mildest and most euphemistic of language  
5 ignoring -- again, in a document meant for  
6 physicians, not meant for the patients themselves,  
7 describing, you know, only the most optimistic  
8 balance of risk-to-benefit ratio as opposed to  
9 recognizing the full range of varying situations.  
10 And, again, in the case specifically of the  
11 Endocrine Society statement, in complete absence of  
12 the consideration -- I shouldn't say complete  
13 absence, but at the same time as failing to  
14 integrate the large number of complete unknowns and  
15 still unexplored alternatives before we get to the  
16 most dramatic of the options.  
17 Q I'm just trying to understand this sentence that  
18 you wrote --  
19 A I'm sorry.  
20 Q -- which is, "The decision to undergo medicalized  
21 transition also represents the decision never to  
22 have biological children of one's own."  
23 In that sentence, medicalized transition only  
24 refers to patients who go from puberty blockers to  
25 hormone therapy; is that right?

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1 MR. RAMER: Objection to form.  
2 A No, my one sentence cannot be considered on its own  
3 without the other sentences that I purposefully put  
4 it together with.  
5 Q So you're not willing to say -- you're not willing  
6 to accept that someone who only undergoes a  
7 mastectomy, for example, could still have  
8 biological children of their own?  
9 MR. RAMER: Objection to the form.  
10 A In its context, my sentence doesn't contest that.  
11 I'm filling in the missing pieces. So the one  
12 sentence taking out just, you know, ends up leaving  
13 different pieces missing. It takes the whole set  
14 of them where I'm pointing out, you know, the  
15 pieces of the puzzle are missing. So I'm alerting  
16 the reader to the missing pieces.  
17 Well, it's true that I am not alerting people  
18 to the not missing pieces. I only need to alert  
19 people to the missing pieces.  
20 So the one sentence on its own is what, in my  
21 view, is one of the missing pieces. There's no  
22 purpose to that sentence to point out the pieces  
23 that were already there to begin with.  
24 Q Do you think that testosterone impairs fertility  
25 for every natal female who takes it?

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1 A For everyone? No. The most -- the powerful  
2 effect, the essentially sterilizing issue happens  
3 with the combination -- that happens from the  
4 combination essentially applying cross-sex hormones  
5 to gonads that still have prepubertal cells.  
6 Q Got it.  
7 A So the automatic sterilization goes from the --  
8 goes to people who essentially were going from  
9 puberty blockers to cross-sex hormones without time  
10 in between to develop adult quality viable gonad  
11 tissue, that I don't remember if it was in this  
12 report, but it was exactly that error for which I  
13 was faulting several of the other experts, as they  
14 report, you know, some of the relatively mild side  
15 effects of one or the relatively mild side effects  
16 of the other where the actual danger is in the  
17 combination, and nobody mentions the combination.  
18 Q Understood. Earlier you were talking about  
19 prepubertal children making these decisions about  
20 fertility, but in the United States it's their  
21 parents consenting to treatment; right?  
22 MR. RAMER: Objection to form.  
23 A I don't think -- that doesn't really describe the  
24 full sentence. It's not like the parents are  
25 deciding -- the parents aren't talking with each

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1 other should we have grandchildren. The parents  
2 are trying to figure out, you know, what would  
3 help, you know, increase the mood or discomfort of  
4 the profound unhappiness of their child.  
5 And so, from their point of view, they're  
6 doing their best to do what they think their kid  
7 wants or what they imagine their kid would want or  
8 will have wanted when the kid is later an adult and  
9 looking back on the whole thing.  
10 So the parents generally are trying to guess  
11 what the kid would want is -- what the kids would  
12 want. It's also, I think, unfair to describe the  
13 parents' decision-making process as consent as if  
14 it's a cognitive process, when the consent is in  
15 the legal meaning they are providing on paper what  
16 we deem to be consent. But it's a misleading use  
17 of the term to equate legal consent with making the  
18 kid's decision for the kid, when the basis of what  
19 the parent's legal decision is going to be is their  
20 best guess for what they think the kid would want  
21 if the kid were an adult, which the kid isn't.  
22 Q And that's the nature of pediatric medicine as a  
23 general matter?  
24 MR. RAMER: Objection to form.  
25 A This isn't like pediatric medicine as a general

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1 matter. That's the whole problem. In pediatric  
2 medicine in general, we have objective evidence of  
3 an objective process for which we can give -- I'm  
4 making this part up -- a blood test to verify that  
5 the kid has -- you know, to use a usual example,  
6 whatever intersex condition.  
7 This is exactly the opposite condition. We  
8 have zero objective evidence, only subjective  
9 self-report from a prepubescent kid which conflicts  
10 entirely with all of the available objective  
11 evidence. That is entirely unlike the rest of the  
12 pediatric medicine -- or that is entirely unlike,  
13 if I can talk in italics, the process of general  
14 pediatric medicine.  
15 Q On page 109 --  
16 A I'm there. Speak of the devil.  
17 Q Okay. So this is in paragraph 259. You write of  
18 Dr. Turban, "Dr. Turban's employment as director of  
19 a gender program in child and adolescent psychiatry  
20 represents a significant conflict of interest: The  
21 income he derives from his medical treatment of  
22 these children would be directly affected by the  
23 outcome of this case."  
24 Did I read that correctly?  
25 A Those are the sentence -- that's the sentence I

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1 wrote, yes.  
2 Q And Dr. Turban is a psychiatrist; correct?  
3 A Yes, so far as I know.  
4 Q And he is employed in a child and adolescent  
5 psychiatry program?  
6 A Yes. Is it up to a year yet? Recently, but, yes.  
7 Q But you maintain that his income is derived from  
8 endocrine treatments?  
9 A Did I say endocrine?  
10 Q You said his medical treatment. I don't know what  
11 you're referring to there.  
12 A I meant it relatively broadly. It's -- again, I  
13 don't know details about how the specific hospital  
14 works. But the usual procedure, and I don't recall  
15 him ever pointing out an exception, is to engage in  
16 these procedures as a multidisciplinary team.  
17 As a psychiatrist, he would ultimately be  
18 responsible for the mental health assessment or  
19 lack of mental health assessments used in deciding  
20 who would go on to endocrinological treatments.  
21 And the endocrinologist would be responsible then  
22 for ensuring the physical ability of the child to  
23 respond to the medications as desired, but not the  
24 decision whether to.  
25 Q Do you think that everyone who works in a

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1 multidisciplinary gender clinic has a conflict of  
2 interest in these cases?  
3 MR. RAMER: Objection to the form.  
4 A I don't see any way around the idea that when the  
5 legality of providing a service is in question that  
6 there is a conflict of interest for the people  
7 providing that service.  
8 Q Well, Dr. Turban doesn't provide any of the  
9 services directly that are the subject of the  
10 Indiana law; right?  
11 MR. RAMER: Objection to the form.  
12 A I don't know what director would -- I don't know  
13 what you mean by direct. If one is in charge of --  
14 I don't mean to equate the situations, but if one  
15 is the manager of a McDonald's, just because you're  
16 not serving the hamburgers doesn't mean that you  
17 are not affected if they shut down the whole  
18 restaurant.  
19 Q So if they ban puberty blockers and hormones and  
20 surgery, it's your view that not only are the  
21 endocrinologists and the surgeons conflicted --  
22 possessing a conflict of interest, but the  
23 psychiatrists are as well?  
24 MR. RAMER: Objection to the form.  
25 A Yes, everybody involved in the provision of the

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1 service. And if the -- to the extent that the  
2 provision of the service is multidisciplinary, and  
3 he is the doctor -- he is the director directing  
4 the entire process, he is ultimately responsible  
5 for it.  
6 And it would be that entire -- it would be the  
7 entire service he is directing that would be  
8 switching to the other use of the term directly  
9 influenced by regulations and findings that limit  
10 or ban or restrict the provision of that very  
11 service.  
12 Q So is it just the directors of the program or every  
13 physician who works at a gender program?  
14 MR. RAMER: Objection to the form.  
15 A I don't think I necessarily need to allow for the  
16 possibility that there could be an exceptional  
17 situation that doesn't immediately come to mind,  
18 but to -- it's I can't think of a situation in  
19 which one can be a specialist in providing a  
20 specialized service that -- for which one would not  
21 be in a conflict of interest if that service is  
22 prevented.  
23 The only exceptions, and I'm not even sure  
24 they count as exceptions, depending on -- again, in  
25 different hospitals in the U.S. is the

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1 international outlier in this again, there can be,  
2 or I can imagine there existing a situation in  
3 which, for example, a nurse is simply assigned a  
4 department. And if one department is restructured  
5 or canceled, then he, she, or they are reassigned  
6 to another clinic so that it's, you know,  
7 relatively invisible to them, I can imagine the  
8 possibility for certain circumstances like that.  
9 I cannot imagine such a situation from the  
10 person -- from a person legitimately holding the  
11 title director.  
12 Q Do you believe that the physicians who treat  
13 patients at gender clinics would not have jobs if  
14 puberty blockers and gender-affirming hormones were  
15 banned?  
16 A I would be surprised certainly if they became  
17 unemployed. But, again -- but they would be, you  
18 know, in any meaningful way highly impacted.  
19 Q They couldn't practice other aspects of their  
20 specialties?  
21 MR. RAMER: Objection to the form.  
22 A They would be forced to. As I say, they would be  
23 impacted, but I would be surprised if they ended up  
24 unemployed.  
25 Q So their income wouldn't necessarily be impacted?

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1 MR. RAMER: Objection to the form.  
2 A I don't think that fairly describes the situation.  
3 It's -- I don't think that fairly describes the  
4 situation, no.  
5 Having one's means of income being required,  
6 you know, against one's will to have to change what  
7 one does for a living in order to maintain one's  
8 income represents a significant conflict of  
9 interest.  
10 Q So based on that, are the only legitimate experts  
11 those who do not treat adolescents with gender  
12 dysphoria?  
13 A That's --  
14 MR. RAMER: Objection to form.  
15 A That's a different question. And as I enumerated  
16 within my report, it is a standard procedure in  
17 producing a systematic review in order to get  
18 people who do not have a direct interest in the  
19 outcome of it.  
20 And that's exactly how Vivienne Cass in the UK  
21 was chosen. And that's how all of the other groups  
22 in all of the other countries were selected. To  
23 pick an odd example, if one wanted to know if  
24 reading fortune tea leaves were scientifically  
25 valid, you could not do it by asking only the

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1 fortune tea leaf readers.  
2 One needs to be able to -- in order to be  
3 without a conflict of interest, one needs to be one  
4 step further away than receiving income from the  
5 provision of the service in question.  
6 Q So you believe Dr. Turban is biased because you  
7 think his compensation is tied to a certain  
8 clinical outcome?  
9 MR. RAMER: Objection to the form.  
10 A I don't think I said biased. I'm, you know,  
11 acknowledging he's in a conflict of interest. The  
12 nature --  
13 Q So you -- okay. Go ahead. Sorry.  
14 A The nature of his writings suggest that, you know,  
15 he has very, very strong beliefs about the  
16 situation. But, again, the term bias is for me to  
17 engage in some mind reading that I'd hesitate to.  
18 It is perfectly legitimate, and it's a matter of,  
19 you know, objective evidence to indicate that this  
20 is a legitimate conflict of interest.  
21 Bias is more cognitive -- is a more cognitive  
22 situation, which is, I think, a legitimate  
23 accusation, but I couldn't say that I have an  
24 objective means of demonstrating it unlike conflict  
25 of interest.

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1 Q So you think that compensation can have an improper  
2 influence on a clinician's perspective?  
3 MR. RAMER: Objection to the form.  
4 A That's not a reference to the proper audience. The  
5 people who are in need of protection, and the  
6 people who are meant to be protected by  
7 conflict-of-interest principles are not the  
8 providers of the service, but the recipients of the  
9 service.  
10 Q What are conflict-of-interest principles?  
11 A Oh, I don't mean them -- as I said, I mean them  
12 generically. If I were going to receive, you know,  
13 any medical service, I expect of the institutions,  
14 whether it's government or medical boards depending  
15 on one's jurisdiction, that if I'm going to be  
16 receiving what I expect to be evidence-based  
17 medicine, I expect that evidence to be evaluated by  
18 people other than the person actually providing me  
19 the service.  
20 If I knew that the only person reviewing my  
21 provider was my provider, I would be in a very  
22 different situation of confidence in making my own  
23 healthcare decisions than if a person at arm's  
24 length were in charge of reviewing the procedures  
25 my provider provides.

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1 Q Do you think being paid by an advocacy organization  
2 might have an improper influence on a clinician's  
3 opinion?  
4 MR. RAMER: Objection to the form.  
5 A I can imagine situations where it would, and I can  
6 imagine situations where it wouldn't. So I  
7 wouldn't automatically -- it would be a legitimate  
8 conclusion, but it doesn't have the automatic  
9 people provided -- the quality of service provision  
10 or the -- tenability's not the word. The safety  
11 and effectiveness of providing a service has to be  
12 conducted by people at arm's length from it.  
13 If one is at a -- is in a position where one  
14 is advocating a particular view, then it's  
15 completely transparent that one is, you know, of  
16 that view or advocating for whatever that situation  
17 is.  
18 That's entirely unlike healthcare where one is  
19 expected to be -- expected and depended upon to be  
20 entirely objective, but it's not -- the  
21 expectations and the people who were meant to be  
22 protected by it are of a different kind.  
23 Q Were you aware that Indiana's expert, Daniel Weiss,  
24 testified before multiple state legislatures in  
25 favor of laws like SEA 480?

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1 MR. RAMER: Objection to the form.  
2 A I'm not even sure who that is.  
3 Q And that he was compensated by Do No Harm for that  
4 testimony?  
5 MR. RAMER: Objection to the form.  
6 A Same, I don't think I know who that is.  
7 Q Is that a conflict of interest to testify before a  
8 state legislature regarding a law and be  
9 compensated by an advocacy organization?  
10 MR. RAMER: Objection to the form.  
11 A I'm still missing a piece. I don't know who or  
12 what it is that we're talking about.  
13 Q Well, I don't think you even have to know who he  
14 is. He's one of Indiana's experts in this case, an  
15 endocrinologist. But he testified regarding a law  
16 like SEA 480, and for that testimony was  
17 compensated by Do No Harm, an advocacy  
18 organization.  
19 I'm just trying to understand under your  
20 framework for conflict of interest, would that be  
21 one?  
22 MR. RAMER: Objection to the form.  
23 A No, I don't think so. Acting in a political  
24 capacity advocating for a political view doesn't  
25 have the same expectations of neutrality as would a

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1 physician -- as a patient coming to a physician  
2 expecting to receive objective feedback and advice  
3 from the physician.  
4 In a governmental situation, there will --  
5 there would generally be people advocating on one  
6 side, people advocating on the other side. And the  
7 influence of whatever money for whatever decision  
8 it is, is almost, I don't know how cynical -- one  
9 could be -- it would be perfectly fair to be  
10 cynical. But that is not the same decision-making  
11 process or position of vulnerability that a patient  
12 has in expecting the advice they get from their own  
13 doctors to be.  
14 Q So is the conflict of interest you describe with  
15 respect to Dr. Turban about a conflict of interest  
16 with his patients, not as an expert in this case?  
17 MR. RAMER: Objection to the form.  
18 A The conflict I'm referring to is the combination of  
19 them.  
20 Q Page 124 --  
21 MR. RAMER: Hey, Chase, we've been going  
22 for --  
23 MR. STRANGIO: So the question I have is, I'm  
24 close to the end. Do you want to sort of go 20  
25 more and try to wrap it up, or do you want to take

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1 a break and then finish? We can take a break, I  
2 can check in with my side, and then we'll just  
3 finish up after the break?  
4 MR. RAMER: I'd appreciate the break.  
5 MR. STRANGIO: Yeah, yeah, yeah, let's do it.  
6 Let's do it. I was trying to get us done, but  
7 understood.  
8 MR. RAMER: No, I appreciate that, too.  
9 MR. STRANGIO: Yeah, it's fine. It's fine.  
10 Five minutes?  
11 MR. RAMER: Works for me.  
12 Doctor?  
13 THE WITNESS: Okay. See you in five.  
14 (A recess was taken.)  
15 BY MR. STRANGIO:  
16 Q Okay. I'm on page 124, paragraph 299 regarding  
17 Dr. Shumer, you write, "Despite his use of dramatic  
18 terms, Dr. Shumer is not a mental health expert  
19 qualified to assess mental health outcomes, and he  
20 cites no evidence to justify any predictions of  
21 suicidality or other predictions of outcomes."  
22 Did I read that correctly?  
23 A Yes.  
24 Q Do medical doctors not typically assess their  
25 patient's mental health?

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1 A Not in the manner -- not in that manner, no.  
2 Again, not -- they're generally, unless they have  
3 specific training, again, specifically for  
4 assessment of such mental health concerns, it tends  
5 to be limited to what a brief screening and  
6 standardized questions of, in general, things to be  
7 on the lookout for. But that's not the context or  
8 situation that he's describing or -- that he's  
9 describing period -- semicolon. Nor is it the  
10 basis for predicting what future situations that do  
11 not currently exist will bring, you know, on the  
12 basis of no evidence whatsoever.  
13 Q And in the previous paragraph you write,  
14 "Dr. Shumer's report provides a highly misleading  
15 discussion of the risks of GnRH agonists and  
16 cross-sex hormones."  
17 Did I read that correctly?  
18 A Yes.  
19 Q And are you an endocrinologist qualified to make  
20 assessments of the risks of GnRH agonists and  
21 cross-sex hormones?  
22 MR. RAMER: Objection to the form.  
23 A That statement doesn't require an endocrinological  
24 background.  
25 Q Do you use social media?

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1 A A little bit.  
2 Q Twitter as we've been discussing?  
3 A Yeah, I try to keep it to roughly, you know, a  
4 tweet or two a day. Usually I'm working on  
5 something else and it occurs to me, oh, people  
6 would be interested to hear that and I'll post it,  
7 or there's a precious pithy thing that, ooh, that  
8 kind of crystallizes it, so I'll release that.  
9 Q And is your handle @JamesCantorPhD?  
10 A Yes, that's correct.  
11 MR. STRANGIO: Can we pull up what's marked as  
12 Exhibit 11.  
13 BY MR. STRANGIO:  
14 Q On February 23 of this year, do you recall  
15 tweeting, "The only ones who crave affirmation more  
16 than trans teens are their doctors"?  
17 A I recall that tweet, yes.  
18 Q What did you mean by that?  
19 A The interactions that I've had with them, with the  
20 ones who in turn discuss or refuse to discuss the  
21 relevant issues on social media are unlike the  
22 healthcare providers I interact with in any other  
23 aspect of human sexuality and unlike the scientists  
24 I interact with on any other issue. There's much,  
25 much less discussion of the content and much, much

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1 more discussion of how it's going to look.  
2 Q And when you're talking about the interactions,  
3 you're talking about interactions on social media?  
4 A Not just. Of course, you know, it is exactly  
5 because the bar for entry into social media is so  
6 low that, you know, the proportion of the publicly  
7 available statements, it takes up so much more than  
8 it. But, no, it's not limited to social media.  
9 Q Do you think that doctors who treat transgender  
10 adolescents are doing so for reasons other than  
11 concern for their patients?  
12 MR. RAMER: Objection to the form.  
13 A As happy as I am to call out what I think is an  
14 unhealthy influence of one's personal  
15 characteristics in one's professional practice, I  
16 wouldn't dichotomize it either.  
17 I would not say as a general rule that -- I do  
18 believe, or I have every reason to believe, that  
19 they genuinely believe that they are helping, but  
20 the set of cases, situations, willingness to take  
21 on risks, willingness to disagree with a popular  
22 idea in the face of evidence suggests that there  
23 is, as I say, an unhealthy or disproportionate  
24 balance of the several inputs and motivations to  
25 behavior.

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1 And, again, I don't mean to isolate people  
2 involved with this issue versus rest of world so  
3 much as I've been involved with very many, you  
4 know, controversial issues. That's not only the  
5 nature of sex research, but it's the nature above  
6 all the other branches, even of sex research, it's  
7 much more a part of the study and of atypical  
8 sexualities.  
9 So relative to other care providers and other  
10 scientists involved with providing professional  
11 care to people with other atypical sexualities, the  
12 cluster of personalities, the type of conversations  
13 that are had and not had, the unwillingness to  
14 respond to the most legitimate, even published  
15 criticisms, this group of people are unlike those  
16 working in any other area of atypical sexuality.  
17 Q And what is -- who is this group of people?  
18 MR. RAMER: Objection to the form.  
19 A People publicly advocating. I really want to say  
20 extremists, I think I want -- I have a hard time  
21 finding a different word than extremists, but  
22 people with an un -- with a disproportionate  
23 conviction of what they're doing is correct without  
24 having balanced it against the enormous number of  
25 unknown potential alternatives -- or potential

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1 alternatives.  
2 Q And is that description one that you would apply to  
3 all doctors that treat trans teens?  
4 MR. RAMER: Objection to the form.  
5 A No, I would automatically hesitate to -- I would  
6 automatically -- I would reflexively refuse to --  
7 Q What about would you apply that description to most  
8 doctors that treat trans teens?  
9 MR. RAMER: Objection to the form.  
10 A I don't think there's a meaningful way -- no, I  
11 would have to couch it more than that. Again, I'm  
12 speaking, you know, on social media referring to  
13 the other people involved in the discussion on  
14 social media. And today, more than ever, the  
15 number of people that -- I think I was making this  
16 point earlier, that people with relatively moderate  
17 or relatively balanced or nuanced perspectives are  
18 silencing themselves for fear of being attacked by  
19 either extremists on one side or extremists on the  
20 other side for not being far enough to that given  
21 extreme.  
22 So it's because they've self-silenced. Again,  
23 outside of the people who were speaking publicly,  
24 and I mean to be speaking of the people who are  
25 speaking publicly, I would not reflexively

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1 generalize that to people who are keeping quiet --  
2 publicly quiet.  
3 Q Including those people who are keeping quiet  
4 publicly and continuing to treat adolescents with  
5 gender dysphoria with medical interventions?  
6 MR. RAMER: Objection to the form.  
7 A Well, again, the continuing to treat is to assume  
8 that there was a baseline against which to compare  
9 them that doesn't exist. This really wasn't  
10 getting done in the way and by the numbers of  
11 people and without the supervision or tracking or  
12 external review that --  
13 Q I wasn't referring to the temporal in the way  
14 you're responding. I just meant someone who's  
15 currently prescribing, let's say, gender-affirming  
16 hormone therapy to adolescents but isn't speaking  
17 publicly on the matter.  
18 Would this tweet apply to them?  
19 MR. RAMER: Objection to the form.  
20 A No. Again, I pretty much mean it to be people who  
21 were speaking -- other people who were  
22 participating in the same forum.  
23 Q And so, when you refer to extremists, are  
24 extremists those who support the provision of  
25 hormone therapy to adolescents with gender

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1 dysphoria?

2 MR. RAMER: Objection to the form.

3 A Not necessarily. There are -- what's missing are

4 the people who merely support. There are very --

5 there are few speakers who merely support.

6 The people I would call extremists would be

7 those for whom there exists no alternative. There

8 is that -- the person asked for it has sufficient

9 basis to do everything you can to make sure that

10 they get it. Rather than cover bases, let's try

11 other things first. Let's not start with the most

12 dramatic of alternatives. Let's skip all of the

13 many unknowns and we're not so sure and use it as

14 a method of first resort. And any resistance is

15 immediately dismissed as politically anathema

16 rather than we're not so sure, let's be more

17 careful until we can be more sure.

18 Q Is the Endocrine Society Clinical Practice

19 Guideline on treatment of gender dysphoria with

20 respect to adolescents an extremist's position?

21 MR. RAMER: Objection to the form.

22 A I don't have an objective way to differentiate

23 extremists from going farther than it should

24 relative to the quality of evidence available.

25 Q Have you treated any of the individual plaintiffs

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1 in this case?

2 A No, I have not.

3 Q Have you ever practiced as a clinical psychologist

4 in Indiana?

5 A No, I have not.

6 Q And do you have any personal knowledge of how

7 treatment for gender dysphoria is provided to

8 adolescents in Indiana?

9 A Not in any direct way. Again, the nature of my

10 expertise is not the specifics of the policy or the

11 patients involved, but on the science according to

12 which the legal system and legislatures are

13 attempting to establish policy.

14 MR. STRANGIO: Just one sec. I'm going to --I

15 don't have anything else on my end.

16 THE WITNESS: That was a fast 20 minutes.

17 MR. STRANGIO: So I'll pass -- it was slightly

18 less. I'll pass the witness.

19 MR. RAMER: And I have no questions for the

20 witness. And we'd just like to review and sign.

21 AND FURTHER THE DEPONENT SAITH NOT.

22

23 JAMES M. CANTOR, PH.D.

24

25

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1 STATE OF INDIANA )

2 ) SS:

3 COUNTY OF BOONE )

4 I, Dana S. Miller, RPR, CRR, a Notary Public in

5 and for the County of Boone, State of Indiana at

6 large, do hereby certify that JAMES M.

7 CANTOR, PH.D., the deponent herein, was by me first

8 duly sworn to tell the truth, the whole truth, and

9 nothing but the truth in above-captioned cause.

10 That the foregoing deposition was taken on

11 behalf of the Plaintiffs, appearing remotely from

12 Toronto, Canada, on the 7th day of June, 2023,

13 pursuant to the Applicable Rules.

14 That said deposition was taken down in

15 stenograph notes and afterwards reduced to

16 typewriting under my direction, and that the

17 typewritten transcript is a true record of the

18 testimony given by said deponent; and thereafter

19 presented to said deponent for his/her signature;

20 That the parties were represented by their

21 aforementioned counsel;

22 I do further certify that I am a disinterested

23 person in this cause of action; that I am not a

24 relative or attorney of either party, or otherwise

25 interested in the event of this action, and am not

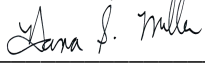
in the employ of the attorneys for either party.

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1 IN WITNESS WHEREOF, I have hereunto set my hand

2 and affixed my notarial seal this \_\_\_\_\_ day of

3 \_\_\_\_\_, 2023.

4 

5 \_\_\_\_\_

6 Dana S. Miller

7 Commission Number 0675790

8 My Commission Expires:

9 January 17, 2024

10

11

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14

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23

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25

1 (Originating Party)  
2 Chase Straffio, Esq.  
3 AMERICAN CIVIL LIBERTIES UNION  
4 125 Broad Street  
5 19th Floor  
6 New York, NY 10004

7 NOTICE OF DEPOSITION FILING  
8 UNITED STATES DISTRICT COURT  
9 SOUTHERN DISTRICT OF INDIANA  
10 INDIANAPOLIS DIVISION  
11 CASE NO. 1:23-cv-00595-JPH-KMB

12 K.C., et al., )

13 Plaintiffs, )

14 -vs- )

15 THE INDIVIDUAL MEMBERS OF THE )  
16 MEDICAL LICENSING BOARD OF )  
17 INDIANA, in their official )  
18 capacities, et al., )

19 Defendants. )

20 In compliance with the Indiana Rules of  
21 Procedure, Federal Rules of Civil Procedure and/or  
22 the Rules of the Industrial Board, you are notified  
23 that the signed original deposition of JAMES M.  
24 CANTOR, PH.D., taken on the 7th day of June, 2023,  
25 has been sealed and submitted to the originating  
party, along with the attached Errata Sheet(s), if  
applicable.

26 (Date received by Circle City Reporting)

27 CIRCLE CITY REPORTING  
28 135 North Pennsylvania  
29 Suite 1720  
30 Indianapolis, IN 46204  
31 (317) 635-7857

	27:21	150:18;154:3	<b>adult-onset (2)</b>	120:19,25;121:7;
<b>\$</b>	<b>accounting (1)</b>	<b>added (1)</b>	146:24,25	122:5;123:4;124:12;
<b>\$400 (1)</b>	107:19	154:7	<b>adults (7)</b>	126:11,24;127:17;
28:9	<b>accumulated (1)</b>	<b>Addiction (3)</b>	36:8,19;37:9;	128:3;131:9;132:6;
	56:19	32:8,17;34:22	109:14;129:6;	19,21;133:13;134:9;
	<b>accuracy (3)</b>	<b>adding (2)</b>	131:10;145:21	135:4,17;137:16,18;
<b>@</b>	124:21;127:21;	135:14;154:1	<b>advanced (1)</b>	139:9;140:14;141:1;
	155:7	<b>addition (3)</b>	32:20	151:2,13;152:22;
<b>@JamesCantorPhD (1)</b>	<b>accurate (10)</b>	8:6;22:9;140:4	<b>advice (4)</b>	153:14,17;154:9;
185:9	18:20;31:24;67:15;	<b>additional (6)</b>	16:3;71:16;182:2,	155:1;156:6,15,20;
	76:14;89:14;125:12;	22:7;65:1;67:5,7;	12	160:24;162:15;
<b>A</b>	128:20;141:9;151:6;	89:3;144:21	<b>advisories (4)</b>	163:8,24;164:11,17,
	164:23	<b>address (1)</b>	74:23;75:12;95:3;	25;165:15;166:14;
<b>abbreviation (1)</b>	<b>accurately (7)</b>	24:8	96:18	167:13;168:1,5,10;
34:21	5:21;77:5,18;	<b>addressed (1)</b>	<b>advocacy (3)</b>	173:12;175:24;
<b>ability (3)</b>	97:13;126:4,9;165:1	157:19	180:1;181:9,17	176:1,17;178:16;
5:21;163:25;	<b>accusation (1)</b>	<b>addressing (2)</b>	<b>advocate (1)</b>	184:2,3;187:1;
173:22	178:23	139:12,15	158:13	188:11,22;189:7,20;
<b>able (10)</b>	<b>accusations (1)</b>	<b>ADF (3)</b>	<b>advocates (1)</b>	191:9
5:24;21:6;24:19;	155:12	14:13,15;16:22	130:21	<b>against (10)</b>
50:9;64:11;65:3;	<b>accustomed (2)</b>	<b>adjusted (1)</b>	<b>advocating (6)</b>	12:12;70:3;78:18;
106:6;131:6;165:21;	19:8;20:6	58:1	180:14,16;181:24;	98:25;108:11;123:4,
178:2	<b>acknowledge (1)</b>	<b>admin (1)</b>	182:5,6;187:19	7;177:6;187:24;
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1 MS. EAGAN: No, Your Honor.

2 THE COURT: All right. State's case.

3 MR. DAVIS: Your Honor, the State calls Dr. James  
4 Cantor when you are ready.

10:39:28 5 THE COURT: I'm ready.

6 JAMES CANTOR, MD,  
7 having been first duly sworn by the courtroom deputy clerk, was  
8 examined and testified as follows:

9 DIRECT EXAMINATION

10:39:46 10 BY MR. DAVIS:

11 Q Good morning, Dr. Cantor.

12 A Good morning.

13 Q Would you state your full name?

14 A James Michael Cantor.

10:40:02 15 Q What is your profession, Dr. Cantor?

16 A I am a clinical psychologist and neuroscientist.

17 Q What degrees do you have? Academic degrees.

18 A Bachelor's degree in computer science and mathematics, a  
19 master's degree in applied psychology, and a Ph.D in clinical  
10:40:17 20 psychology.

21 Q Where do you work?

22 A I am currently in private practice in Toronto, Canada.

23 Q And what is the nature -- are there any particular focuses  
24 of the counseling you provide or the research that you have  
10:40:32 25 performed?

1 A Human sexuality and atypical sexualities.

2 Q Would that include studies of gender identity?

3 A Yes, it is. Yes, it does.

4 Q Are you knowledgeable about the research surrounding  
10:40:47 5 gender dysphoria?

6 A Yes, I am.

7 Q Have you analyzed research concerning the benefits and  
8 harms of different ways of treating gender dysphoria?

9 A Yes, I have.

10:40:54 10 Q Do you have skills and expertise assessing the strengths  
11 and weaknesses of scientific studies?

12 A Yes, I do.

13 Q And do these skills and expertise include judging what  
14 those studies do and do not prove as a matter of science?

10:41:13 15 A Yes.

16 Q Have you treated people who presented with gender  
17 dysphoria?

18 A Yes.

19 MR. DAVIS: Your Honor, we proffer Dr. Cantor as an  
10:41:25 20 expert on psychology, human sexuality, research methodology,  
21 and the state of the research literature on gender dysphoria  
22 and its treatment.

23 THE COURT: Any objection?

24 MS. EAGAN: No, Your Honor.

10:41:37 25 THE COURT: All right. He will be accepted for that

1 purpose.

2 BY MR. DAVIS:

3 Q Dr. Cantor, there is a notebook in front of you with a  
4 blue cover. Would you please turn to the second tab?

10:41:51 5 A I'm sorry. It just occurs to me I didn't bring my reading  
6 glasses. They're in my brief case.

7 MR. DAVIS: Your Honor, can the witness get his  
8 glasses?

9 THE COURT: Absolutely.

10:42:43 10 THE WITNESS: Part 2, you said?

11 BY MR. DAVIS:

12 Q Yes. Tab 2, which is Defendants' Exhibit 2.

13 Can you identify that document, Dr. Cantor?

14 A Yes. That is my report, which I submitted for these  
10:42:54 15 proceedings.

16 Q Thank you.

17 I think actually, since we just heard Dr. Antommara, I  
18 would like to begin with addressing some things that we heard  
19 this morning.

10:43:02 20 Did you have the opportunity hear this morning's testimony  
21 by Dr. Antommara?

22 A Yes, I did.

23 Q Did you understand Dr. Antommara to testify that randomly  
24 controlled studies are not available in this area of medicine?

10:43:16 25 A Yes.

1 Q Did he then say, if you understand -- as you understand,  
2 that because the randomly controlled trials are not available,  
3 we can rely on observational trials?

4 A That is roughly what I understood him to say, yes.

10:43:33 5 Q Do you have any response to that?

6 A Yes. That's not -- it is true that none of the existing  
7 studies are randomized, but it is entirely untrue that we  
8 therefore can rely -- can make decisions based on the least  
9 reliable kinds of studies.

10:43:48 10 There is a wide, wide range of studies in between, and  
11 there's a wide, wide, range of different scientific  
12 methodologies that we can employ in order to minimize the laws  
13 that we get from completely randomized studies.

14 It's also actually possible if we wanted to conduct such  
10:44:09 15 studies such as by allowing people to undergo different parts  
16 of a treatment at different times, so we can compare the  
17 differences between them when one group has started on that  
18 type of treatment and the other hadn't yet.

19 Q Okay. So the randomized trials would be considered like  
10:44:29 20 the gold standard, the top-tier level of scientific research?

21 A Randomization is one factor in determining how high  
22 quality a study is. It is not a -- it's neither an all or  
23 nothing.

24 Q I understand. But did I understand you to say that if you  
10:44:47 25 assume that's not available, that's no reason to drop down to

1 the lowest quality of evidence?

2 A That is correct.

3 Q I understood Dr. Antommaria to testify that the level of  
4 evidence supporting the WPATH and Endocrine Society guidelines  
10:45:05 5 is comparable to the level of evidence supporting other  
6 treatments in pediatrics. Can you respond to that?

7 A I am not aware, of course, of all the other treatments in  
8 pediatrics. However, there are no studies yielding positive  
9 effects of either the Endocrine Society standards or the WPATH  
10:45:24 10 standards.

11 The studies which have shown effects have used the Dutch  
12 model, which uses a higher set of standards than either the  
13 Endocrine Society or the WPATH group.

14 Q Speaking of the Dutch study, I also understood  
10:45:42 15 Dr. Antommaria to say there is no high quality evidence  
16 supporting the use of psychotherapy alone for gender dysphoria.  
17 Do you agree with that?

18 A No, I do not.

19 Q What would you say in response? What's the countervailing  
10:45:56 20 evidence?

21 A There exists roughly 15-ish studies following up these  
22 kids at all. All of the studies, which without exception that  
23 used medical interventions also used psychological --  
24 psychotherapy at the same time. So all of the studies which  
10:46:17 25 could seem to show a benefit for medical interventions are

1 unable to distinguish that it was the medical intervention  
2 causing the benefit, versus the psychotherapy causing the  
3 benefit.

4 Of those studies, two were designed in a way that it was  
10:46:33 5 possible to peel apart the effects of psychotherapy versus  
6 medicine -- the Costa study and the Achille study. The full  
7 references are in my report.

8 In the Costa study, there was a -- there were two phases.  
9 There was a phase that people went through when they received  
10:46:52 10 psychotherapy alone. And then in the subsequent phase, they  
11 received both psychotherapy and medical interventions.

12 There were no significant differences between the group.  
13 Both groups improved, and there were no significant differences  
14 between the group that received psychotherapy alone and the  
10:47:08 15 group that received psychotherapy plus medical interventions.

16 The other study, the Achille study, used a statistical  
17 method to control for the effects of psychotherapy. That group  
18 also improved after medical intervention, but when the effects  
19 of psychotherapy were statistically controlled, there was no  
10:47:28 20 additional benefit of the medical interventions after that.

21 Q I want to break some of that down. You mentioned studies  
22 where all the participants were receiving both psychotherapy  
23 and medical-affirming care at the same time, right?

24 A Correct.

10:47:48 25 Q Is that the Dutch -- oh, is the Dutch protocol, the Dutch

1 study an example of such a study?

2 A Both Dutch studies, the 2011 and the 2014, yes.

3 Q If, at the end of that trial, you look and see the people

4 that were receiving both psychotherapy and medical-affirming

10:48:06 5 care at the same time, improved in mental health at the end of

6 the trial, can you as a scientist tell whether the improvement

7 is the result of the pharmaceuticals or the psychotherapy?

8 A Not in the design of those studies, no. That's what in

9 science is called a confound.

10:48:27 10 Q Confound?

11 A Correct.

12 Q What does that mean, confound?

13 A It describes exactly that situation. When two things are

14 done at once, when you see the result, you can't peel apart

10:48:37 15 which -- which of those two interventions was responsible or

16 the interaction between those two interventions was

17 responsible.

18 Q Okay. But the Costa and Achille study, on the other hand,

19 they do provide scientific evidence that psychotherapy alone is

10:48:53 20 helpful, did --

21 A That's correct.

22 Q Okay.

23 A That psychotherapy is helpful and not the medical

24 interventions.

10:49:01 25 Q I also understood Dr. Antommaria to say that he had not

1 read studies about detransitioning. But if it ever became  
2 relevant, he would make an effort to review such studies.

3 You are familiar with the body of the literature  
4 concerning gender dysphoria, correct?

10:49:21 5 A Yes.

6 Q In your opinion, are the studies of detransitioning  
7 relevant to someone trying to assess the benefits and harms of  
8 these treatments?

9 A Yes, of course. It's very difficult -- detransition would  
10:49:35 10 be the situation that one is trying to avoid. The best way to  
11 avoid a situation is to understand that situation.

12 Q Dr. Antommaria said that there are prospective  
13 observational trials that demonstrate the efficacy of puberty  
14 blockers in gender-affirming care, and then later said the  
10:49:59 15 trials he is referring to were primarily the Dutch group  
16 studies.

17 Are those the studies you just mentioned, the 2011, 2014  
18 studies?

19 A Those are the Dutch studies that usually we use. I can't  
10:50:12 20 know if he is referring to some other study that I didn't make  
21 a specific reference to.

22 Q That's fair.

23 In this area of medicine, when someone's talking about the  
24 Dutch studies, the Dutch group studies, is it your  
10:50:25 25 understanding they're generally referring to these 2011 and

1 2014 studies from the Dutch project?

2 A Almost always, yes.

3 Q Okay. And those are the studies you just mentioned that  
4 have the confound problem, right?

10:50:36 5 A Correct.

6 Q You can't unpack whether it's the psychotherapy or -- not  
7 from that study, you can't unpack whether it is the  
8 psychotherapy or the pharmaceuticals that are making the  
9 difference?

10:50:47 10 A That's correct.

11 Q Okay. More generally, I'd like to read for you a  
12 statement from the plaintiffs' brief in support of their  
13 preliminary injunction motion.

14 For the record, it's Doc 8 at page 18.

10:51:07 15 Dr. Cantor, the plaintiffs wrote in that brief, For more  
16 than four decades, medical organizations have studied and  
17 created an evidence-based standard for the medical treatment of  
18 transgender patients. This standard confirms that transition,  
19 including puberty blockers and hormone therapy where  
10:51:26 20 appropriate, is the only safe and effective treatment for  
21 gender dysphoria?

22 Dr. Cantor, does the research literature support that  
23 statement?

24 A No, it does not.

10:51:37 25 Q Do you understand the plaintiffs primarily to be pointing

1 to the guidelines of medical organizations such at WPATH and  
2 the Endocrine Society and the American Academy of Pediatrics to  
3 support their positions that wish to continue giving these  
4 treatments to children?

10:51:52 5 A Yes. They cited those repeatedly.

6 Q Okay. What observations have you had about the WPATH  
7 guidelines and whether they have support in evidence?

8 A The WPATH guidelines and the Endocrine Society guidelines  
9 have been tested among the set of -- as I say, roughly 15  
10 outcome studies, some of them have used the WPATH guidelines or  
11 Endocrine Society guidelines instead of the Dutch protocol.  
12 And those studies demonstrated that there was no improvement at  
13 all.

14 I shouldn't say none at all. One of them used several  
10:52:36 15 kinds of measures of improvement, and I think it was all but  
16 one demonstrated no differences at all. And one small one gave  
17 an indication that suggested the possibility.

18 Q Have these organizations acknowledged anything about  
19 desistance rates -- these organizations, I'm referring  
10:52:57 20 specifically to WPATH and the Endocrine Society?

21 A I can't say that they've never addressed it, but to the  
22 extent if it was ever addressed, they are grossly, grossly  
23 minimized.

24 Q Can I refer you to paragraph 12 of your report on page 4?

10:53:33 25 A I got it.

1 Q You say in that paragraph that the plaintiffs'  
2 documentation -- and I assume by documentation, you mean  
3 their -- the pleadings in this case and the briefs that you had  
4 seen?

10:53:50 5 A That's correct.

6 Q You said the plaintiffs' documentation misrepresents the  
7 contents of the associations' policies themselves.

8 Which associations were you speaking of there?

9 A They mentioned several other societies which made short  
10:54:04 10 statements in general support of sexual diversity, but without  
11 actually issuing specific standards about how to treat people  
12 in that community with what or at what ages.

13 Q And what inconsistencies did you see between what those  
14 organizations have said and the arguments you saw in  
10:54:23 15 plaintiffs' briefing?

16 A The plaintiffs referred to the societies as if they were  
17 providing very specific support for very specific policies  
18 rather than general recommendations to provide, for example,  
19 respect and values for diversity, but no specific guidelines.

10:54:48 20 Q Okay. Well, looking at paragraph 12, is one of your  
21 points here looking at the bullet points that even WPATH and  
22 Endocrine Society acknowledge as you write, that desistance of  
23 gender dysphoria occurs in the majority of prepubescent  
24 children?

10:55:04 25 A That is correct.

1 Q And then turning the page, were there other issues you saw  
2 that the statements -- that these organizations believed and  
3 plaintiffs' briefing was inconsistent with what the  
4 organizations had stated?

10:55:16 5 A That the issue of mental health and that mental illnesses  
6 and similar concerns need to be resolved before considering  
7 transition rather than depending on transition to be the  
8 resolution of, for example, depression and anxiety.

9 Q And have any of these organizations acknowledged that  
10:55:42 10 puberty-blocking medication is an experimental not a routine  
11 treatment?

12 A Yes, they have used that phrase.

13 Q Which organization?

14 A Again, I would have to look up to see exactly who used  
10:55:52 15 which word. I believe it was WPATH, but I again have to go  
16 back and check to make sure that it was they.

17 Q And let's turn to the American Academy of Pediatrics. And  
18 I will refer you to your appendix.

19 And, Dr. Cantor, if you look at the top of the page, you  
10:56:12 20 will see a line of blue figures. And it's page X out of 106.  
21 The appendix I am referring to is page 100 out of 106.

22 A Got it.

23 Q What does the American Academy of Pediatrics or AAP, what  
24 do they recommend in this area of care?

10:56:42 25 A They recommend what I can best describe as affirmation on

1 demand.

2 Q Okay. Did you review their recommendation when it came  
3 out?

4 A Specifically I reviewed the sources on which they based  
10:56:58 5 their recommendations.

6 Q Okay. Did you write about that?

7 A Yes, I did.

8 Q And does that appear as an appendix to your report  
9 beginning at page 100 of that pdf?

10:57:09 10 A That is correct. I summarized all of my comments. I  
11 submitted them to a journal where they underwent peer review.  
12 And it's an official published peer-reviewed paper.

13 Q This is not a letter to the editor?

14 A That is correct. This is part of a scientific -- now part  
10:57:22 15 of the scientific literature.

16 Q What did you comment upon?

17 A I really just checked what the authors of the AAP policy,  
18 Dr. Rafferty, what their claims were, what they said was in  
19 their references versus what was actually in their references.

10:57:43 20 And not only did their sources not contain what they were  
21 alleged to have obtained, they often contained the very  
22 opposite of what the AAP policy said they contained.

23 Q Did you have an agenda to disprove -- to prove or disprove  
24 anybody when you undertook that review of the evidence?

10:58:01 25 A I wouldn't say an agenda other than to set the record --

1 pardon the pun -- straight.

2 This was a situation where these sources I had known for  
3 many years. I had read them when they had first came out.

4 And when AAP came out with its policy, I was stunned by  
10:58:21 5 its content. And as I read what they were basing it on, my  
6 recollection was immediately this is not what those sources  
7 said.

8 So immediately I just started double checking myself. Did  
9 I misread something? Am I misremembering something?

10:58:36 10 And as I just checked in my own files with copies of these  
11 papers -- most of these papers already in it, my memory was  
12 correct. They said as -- the kinds of things I recalled them  
13 to be saying.

14 Because we were now talking a major medical association  
10:58:51 15 rather than an individual other scientist. This was different  
16 from just one scientist like me disagreeing with another  
17 scientist. This was now -- now had the potential to cause a  
18 great deal of damage to a great number of people.

19 So because I had the ability to do it, I simply summarized  
10:59:11 20 the contents of the original paper and contrasted point by  
21 point the claims being made by AAP and simply quoting verbatim  
22 what was in the original studies.

23 That entire thing was published, and the AAP has never  
24 responded. They were approached by the media, and they just  
10:59:33 25 would refuse to talk even to the media. They have yet to have

1 any response.

2 Q So to date, the AAP has not responded to the criticisms  
3 that you raised?

4 A That is correct.

10:59:42 5 Q I will refer you now to page 6 of your report. Going by  
6 the numbers at the bottom of the pages.

7 A Yep.

8 Q As you noted in your review of the plaintiffs' expert  
9 report -- well, first off, did you review the expert reports  
11:00:08 10 submitted by the plaintiffs by Dr. Hawkins and Dr. Ladinsky?

11 A Yes, I did.

12 Q And did you note that they studied a 2016 Olsen study  
13 claiming that it proves that transition reduces the risk of  
14 mental illness? That that was their claim?

11:00:23 15 A Correct.

16 Q Does the Olsen study show that?

17 A Just referring to my own report. Ultimately, no, it did  
18 not. There was several statistical errors in the Olsen study.  
19 The data were obtained then by the -- they -- upon request, and  
11:00:45 20 Olsen provided their data to another author who reanalyzed -- I  
21 should say, correctly analyzed the Olsen data, who demonstrated  
22 that Olsen's data did not contain evidence of improvement. In  
23 fact, it contained evidence of deterioration.

24 Q So in your opinion, does the 2016 Olsen study support  
11:01:04 25 plaintiffs' position that children need these affirming --

1 these medicalized affirming treatments in order to improve  
2 their mental health?

3 A No, it does not. Making such a claim is a half truth. It  
4 would ignore the subsequent entries in the scientific  
11:01:20 5 literature.

6 Q And what about the de Vries study that plaintiffs cited in  
7 which you address on page 9 of your report? And does it show  
8 that medical transition of minors improves mental health?

9 A No. It contains part of the confound. The de Vries study  
11:01:43 10 as part of a Dutch group also included psychotherapy during  
11 transition. So it is not possible to differentiate which type  
12 of therapy, medical or psychotherapy, is responsible for the  
13 benefits reported in that study.

14 Q I see. So participants in that study did have improved  
11:02:00 15 mental health, correct?

16 A Yes.

17 Q But it's just not possible scientifically to tell what  
18 caused the improvement?

19 A Correct.

11:02:06 20 Q And what about the Greene and Turbin studies plaintiffs'  
21 experts cited which you discuss in paragraph 24 of your report?

22 A Yep.

23 Q Do those studies show that medical transition improves  
24 mental health?

11:02:25 25 A No, they do not. These are retrospective correlational

1 studies. They are not able of describing any causal effect  
2 coming to any causal conclusion.

3 Q Okay. Now, you mentioned there that -- you say this very  
4 pattern is what one would predict from clinical gatekeeping.

11:02:43 5 What do you mean by clinical gatekeeping?

6 A One of -- across the various clinical standards are to  
7 prevent somebody with mental illness from undergoing  
8 transition. So such people are being held back. They're being  
9 filtered out of groups who do undergo transition.

11:03:03 10 So when a clinic then compares the people who underwent  
11 transition to the people in their files who did not undergo  
12 transition, they are necessarily comparing a group of people  
13 from whom the mental illness was removed and comparing them to  
14 a group of people from whom the mental illnesses were not  
11:03:22 15 removed.

16 So when you see better mental health amongst the people  
17 who had transitioned, the improvement is not because of the  
18 transition, the improvement is because you have removed the  
19 people with the worst mental health from the group in the first  
11:03:40 20 place.

21 Q Okay. So is it correct, then, that one thing you might  
22 see in these studies is by picking out the people with the best  
23 mental health, and giving them the treatment, then comparing  
24 them to the people with lower mental health, then, of course,  
11:03:57 25 the people who went through the study would do better?

1 A That is correct.

2 Q Did you review any of the other studies that plaintiffs  
3 have submitted into evidence such as the Allen study, the  
4 Turban articles, the Biggs (phonetic) study, the Lopez de Lara  
11:04:24 5 study, Tordoff?

6 A Yes, I have.

7 Q Do you have any comments on those studies and whether they  
8 support plaintiffs' position?

9 A They suffered from the same methodological problems as the  
11:04:35 10 other studies.

11 Q Did any of those studies support the position that medical  
12 transition improves mental health?

13 A No, they did not.

14 Q In minors with gender dysphoria?

11:04:47 15 A Correct. No, they do not.

16 Q Oh. What has been called the Yale study by Brouware,  
17 B-R-O-U-W-A-R-E, was the first named author. Did you review  
18 that one?

19 A Yes, I did, but it wasn't a study.

11:05:07 20 Q What was --

21 A Apparently, that was a report submitted by those authors  
22 for another -- or for a combined set of court cases.

23 Q Okay. But you would not refer to that document as a  
24 scientific study?

11:05:21 25 A From the Yale group with -- again, the name I don't -- I

1 hesitate to try to pronounce, but, no, it was not a study at  
2 all. It was those authors' report reviewing the literature and  
3 providing their opinions.

4 Q Okay. As a matter of fact, Dr. Ladinsky was asked about  
11:05:39 5 that study yesterday. And for the record, that testimony  
6 appears on page 116 of the rough transcript.

7 The question was: In this document, do the authors also  
8 cite a number of peer-reviewed studies that contradict some of  
9 the supports or the principles that the State articulated as  
11:06:00 10 the reasons for SB 184? And Dr. Ladinsky responded, They do, a  
11 considerable compendium of them.

12 Is she right? Did those authors show that there are  
13 studies that contradict the State's position in this case?

14 A There was such a statement. There was no meaningful way  
11:06:21 15 to try to put together what claim went together with what  
16 source. Rather than -- what's done more typically either in  
17 science or in pause, best as I understand, is here the claim  
18 and here is the source justifying it. Here is next claim, here  
19 the source justifying it.

11:06:38 20 Instead, that document made a long series of unsourced  
21 claims and then provided a long series -- a series of very  
22 large footnotes with 20 and 30 references. And there was just  
23 no way to see what fact was alleged to have come from what  
24 source.

11:06:56 25 Q So we've talked about whether the literature the

1 plaintiffs' -- the studies that plaintiffs cite to support  
2 their position. Let's talk about whether the literature  
3 supports the State's position. But a little background first.

4 Could you describe from your review of the literature just  
11:07:17 5 what's the difference between adult onset gender dysphoria,  
6 child onset, and adolescent onset? And I know this is a broad  
7 question, but I just mean like age groups.

8 A Usually we would be referring to these as a prepubescent  
9 onset. Then the literature is very, very long, but reported on  
11:07:37 10 adult onset. And by adult, on average, these were people in  
11 their 20s and in their 30s and 40s. It was very, very  
12 distinct. It was not, you know, a bell-shaped curve with some  
13 midpoint around 18 or 19 years old.

14 It's only within the past --

11:08:02 15 THE COURT: Hold on one second.

16 Go ahead. Sorry.

17 THE WITNESS: It's only within the past ten years or  
18 so that a different profile has begun to emerge and was noticed  
19 by clinicians. And that now is being called either adolescent  
11:08:20 20 onset or rapid onset.

21 Now, all three of these groups have in common that they're  
22 complaining about the same thing. Doc, I feel like I am in the  
23 wrong body. Doc, I am the brain of one, but in the body of the  
24 other.

11:08:34 25 So the way that they describe it is similar. But every

1 objective way we have of measuring these people shows that  
2 these are independent phenomena. They are not related except  
3 in the way that people describe the situation, describe what  
4 they're experiencing.

11:08:50 5 The best analogy I have would be if somebody came to a  
6 doctor saying I have a headache. Okay. I got it. Got that's  
7 a symptom. I have some more questions. But we cannot from  
8 that say that a migraine headache is the same thing as a  
9 tension headache is the same thing as having just suffered a  
11:09:08 10 head injury.

11 The causes are different. How we respond to them is  
12 different. And the other characteristics about each of these  
13 are different. They only resemble each other in the most  
14 superficial ways.

11:09:19 15 Childhood onset or prepubescent onset gender dysphoria  
16 appears to be entirely unrelated to adult onset gender  
17 dysphoria. And the two of those appear to be entirely  
18 unrelated to the rapid onset or adolescent onset gender  
19 dysphoria.

11:09:40 20 BY MR. DAVIS:

21 Q Well, let's break that down. Adult onset, typically  
22 people who present with what you're referring to adult onset  
23 gender dysphoria, what age are they when they come into the  
24 doctors' office and say, something's wrong?

11:09:50 25 A On average, in their 30s and 40s.

1 Q Okay. Has there been research considering whether  
2 those -- that universe, the adult onset universe does well  
3 after transitioning?

4 A Those who are mentally healthy by and large do, do well  
11:10:08 5 after transition.

6 Q Can you apply those studies to consider whether someone  
7 with child onset gender dysphoria is going to do well after  
8 transitioning?

9 A No. Because these are independent phenomena. The  
11:10:23 10 information from one does not -- from one group does not  
11 generalize to the other.

12 Q Comparing the adult and the child onset, what is the  
13 difference that makes the studies of one, you know, it's not  
14 apples to apples?

11:10:35 15 A Correct.

16 Q Okay. What is the difference between those patients?

17 A The -- they -- as I say, differed in just about every  
18 objective measure we've been able to apply to them.

19 There are, of course, the ages themselves. Something --  
11:10:53 20 the sex ratios in them are different. The adults are almost  
21 100 percent biological male. There's more of a mix amongst the  
22 childhood onset.

23 The adults are almost always attracted to females. That  
24 is to say, relative to being biological male, they are almost  
11:11:13 25 always heterosexual.

1 The childhood onset almost always are attracted to the  
2 same biological sex. They are almost always homosexual.

3 Q Talking about the child onset, is that a new phenomenon,  
4 child onset gender dysphoria?

11:11:31 5 A I wouldn't say new. It's been systematically studied for  
6 20 to 30 years'ish.

7 Q From the literature that you reviewed, do most of these  
8 kids, if not socially transitioned and given hormones, will  
9 they want to transition after reaching puberty?

11:11:52 10 A Generally not.

11 Q And page 36 -- excuse me -- paragraph 36 of your report,  
12 Dr. Cantor, what statistics do you provide about the rates of  
13 desistance among those presenting with childhood onset gender  
14 dysphoria?

11:12:15 15 A The exact numbers are between 61 to 88 percent of them  
16 desist. In the appendix in my report, I list all of the  
17 studies that have ever been conducted with that group, all the  
18 outcome studies that have been conducted with that group.

19 Q We probably both need to slow down just a little bit  
11:12:37 20 for...

21 A I'm from New York. It just happens.

22 Q We'll do our best.

23 Dr. Hawkins was asked about your paragraph 36 yesterday.

24 And I will represent that on page 30 of the rough transcript,  
11:12:54 25 she said that when the study such as the ones you're citing

1 offers this elevated rate of desisters, quote, what we tend to  
2 find is that the initial cohort that was given the diagnosis of  
3 gender dysphoria is actually false.

4 My question, Dr. Cantor, is: Does the research literature  
11:13:15 5 support Dr. Hawkins's statement?

6 A No. As I say, I listed every single such study.

7 Q Do we have any tools today that reliably tell us which  
8 kids will desist and which kids will persist?

9 A No, we do not. There have been some attempts to develop  
11:13:34 10 such a test, but they have never been able to find a good  
11 characteristic, a feature, a pattern, a test result in which  
12 the majority continued to want to persist.

13 The best that they have ever been able to do was find a  
14 tool which distinguished unlikely to want to persist versus  
11:13:54 15 even less likely to want to persist.

16 Q There's been testimony about something called the DSM-5.  
17 Do you know what that is?

18 A Yes, I do.

19 Q What is it?

11:14:04 20 A The full name is the Diagnostic and Statistical Manual of  
21 Mental Illnesses, published by the American Psychiatric  
22 Association.

23 Q If someone were to claim that now that we have the DSM-5  
24 we may be able to do a lot better with identifying who's the  
11:14:24 25 desister and who is the persister, is there any research on

1 that?

2 A No. Nobody's ever tried to differentiating any of the  
3 DSMs from DSM-I through its various versions to the current  
4 one.

11:14:38 5 Q So there have been at least five?

6 A There was a I, a II, a III, III-R, IV, IV then had a text  
7 revision. They switched some of the commentary around the  
8 diagnoses, but they didn't change any of the diagnostic  
9 criteria themselves. There was then the 5. And there is as of  
11:15:01 10 last month a 5 again with a text revision, but no changes to  
11 any of the actual diagnostic criteria.

12 THE COURT: Mr. Davis, how much longer do you think we  
13 will be?

14 MR. DAVIS: Your Honor, direct will take us up to  
11:15:14 15 about noon, I would predict. There's just a lot to cover with  
16 Dr. Cantor.

17 THE COURT: I am not rushing you. I am just trying to  
18 get a road map of that.

19 So how long do we think cross might be?

11:15:25 20 MS. EAGAN: It's difficult to predict because I am not  
21 sure what else he may say, but maybe an hour, hour or less, I  
22 would think.

23 THE COURT: All right. I am leaning toward an earlier  
24 lunch than we did yesterday. So maybe -- if it's okay with  
11:15:45 25 you, let's just go ahead and find a stopping point at your

1 leisure, and we will just pick back up after lunch.

2 MR. DAVIS: Thank you, Your Honor. This is as good as  
3 any.

4 THE COURT: Is it?

11:16:00 5 MR. DAVIS: Yes. We have just talked about DSM-5.  
6 Going to watchful waiting next. This is as good a place as  
7 any.

8 THE COURT: Okay. Good. Good. With that said, then  
9 are we still on target with your last witness?

11:16:17 10 MR. DAVIS: Yes, Your Honor. Ms. Wright is here. I  
11 don't know if she is in the courtroom yet or not, but she is in  
12 Montgomery, and she will be ready to go when we finish with  
13 Dr. Cantor.

14 THE COURT: We think the length of that witness would  
11:16:30 15 be what?

16 MR. DAVIS: Oh, I would say direct would be well under  
17 30 minutes, but I don't know about cross.

18 THE COURT: Okay. All right. Okay. Well, I think  
19 we're on target.

11:16:38 20 Let's take a good long lunch today. Let's see here.  
21 Let's come back at 12:45.

22 MR. DAVIS: Thank you, Judge.

23 THE COURT: Thank you.

24 MR. DOSS: Judge?

11:16:54 25 THE COURT: Yes?

1 MR. DOSS: Closing, how long would you like?

2 THE COURT: You know, I mean, this is important. I'm  
3 not going to, you know, jack everybody up on this, but to the  
4 extent you can hold it to around 25, I think would probably be  
11:17:07 5 a good thing.

6 And in your openings, I think you really road mapped it  
7 very well, both sides did.

8 So, you know, again, I know the arguments. I'm really  
9 interested in, you know, some analysis with case law. And I am  
11:17:22 10 going to be directly asking about a few cases. I'm very  
11 interested to know parallels between the Arkansas decision and  
12 that law. And then I may give you some hypotheticals that you  
13 won't like.

14 See you after lunch.

11:17:40 15 (Recess.)

16 THE COURT: All yours, Mr. Davis.

17 MR. DAVIS: Thank you, Judge.

18 BY MR. DAVIS:

19 Q Welcome back, Dr. Cantor.

12:51:00 20 We spoke earlier about the Dutch protocol. Did the  
21 participants in those Dutch studies have psychotherapy before  
22 beginning treatment? Before that study?

23 A They were receiving treatment as part of their  
24 participation in the study. I don't think they reported  
12:51:21 25 whether anybody happened to have attempted psychotherapy before

1 approaching the clinic at all.

2 Q Okay. Forgive me if I'm mistaking which study is which.

3 I was reading about a study that described the psychotherapy  
4 that was available to the participants as extensive. And that  
12:51:40 5 that extensive psychotherapy was at least two years. Which  
6 study am I thinking of?

7 A That wouldn't have been a particular study so much as what  
8 they use in their process in general.

9 And then the Dutch group was reporting the results, you  
12:51:56 10 know, of -- periodically over the course of the study.

11 Q I see.

12 A But by the time the first set of results, their earlier  
13 study, the 2011 study, the participants in it will have already  
14 been through a substantial amount of therapy.

12:52:13 15 Q Okay.

16 A They also emphasize that in assessing the children that  
17 it's a very extensive assessment, and the assessment itself was  
18 also ongoing over the course of the study.

19 So even before deciding who might be eligible for  
12:52:30 20 hormones, they have now many, many months to years' experience  
21 with the particular case even with a particular child even  
22 before making a decision. That's very, very different from  
23 just having an appointment, taking a test, and then having a  
24 diagnostic decision an hour later.

12:52:46 25 Q That is exactly what I was meaning to ask you about. I

1 was using sloppy language.

2 So this extensive assessment that happened before some of  
3 these children began treatments, they were assessed, you said,  
4 over a course of a couple of years?

12:52:59 5 A Correct.

6 Q Okay. So does literature support having such an extensive  
7 assessment period before subjecting someone to these  
8 treatments?

9 A I don't know if I would say support it, but all of the  
12:53:16 10 conclusions that come from the literature depend on it.

11 Q Thank you.

12 Is there a way of treating gender dysphoria that some  
13 practitioners refer to as a watchful waiting approach?

14 A Yes. Watchful waiting usually refers specifically to  
12:53:40 15 withholding any decision about medical interventions until they  
16 have a better idea or feel more confident for a particular case  
17 about whether that kid is going to be a persister or desister.  
18 It is given the knowledge that that's available that the  
19 majority of these kids do desist. Nobody wants to make a  
12:54:00 20 decision upon first appointment.

21 And so -- so they tend to provide psychotherapy, whatever  
22 kind of care, whatever is appropriate to the individual kid  
23 until enough time has gone by to give -- to suggest is this a  
24 kid whose feelings like they're feelings are slowing down and  
12:54:19 25 they just need more time, are they building up, or are they

1 staying steady?

2 So the watchful waiting period would be postponing any  
3 decision about medical interventions until the clinicians had  
4 some confidence.

12:54:31 5 Q While you are watching and while you are waiting, are you  
6 just leaving him alone, or her?

7 A No. That would be the time during which one would be  
8 supplying a therapy for whatever else is going on in the kid's  
9 life.

12:54:42 10 Q Okay.

11 A Usually they're associated with -- there's a great deal of  
12 what we call comorbidity. They're also suffering from other  
13 problems at the same time, either depressions, anxieties, early  
14 evidence of personality disorders, for example. And it's never  
12:55:00 15 clear whether their gender dysphoria is a result of those other  
16 psychological problems.

17 So by helping them develop the tools to deal with those  
18 other problems, if they remain dysphoric afterwards, we know  
19 that the dysphoria wasn't the result of those other problems.  
12:55:17 20 So rather than just leaving them alone, they're still receiving  
21 support, and the family is still receiving support over that  
22 period.

23 Q So I believe you pointed out in your report that clinical  
24 guidelines suggest that mental health issues such as the  
12:55:33 25 comorbidities you mentioned should be resolved before

1 transition; is that correct?

2 A Yes.

3 Q Okay. Why?

4 A Because it's never clear what's causing what. We cannot  
12:55:44 5 from a correlation conclude anything about a causation. It's  
6 very possible, and it's been frequently observed that a lot of  
7 these kids are using gender issues as an explanation for the  
8 unhappiness that they're experiencing elsewhere in their life.

9 So rather than developing the skills to -- for example --  
12:56:04 10 better social skills. If a person feels awkward and they're  
11 withdrawing from kids their own age, we are not sure if they  
12 want to transition because they're blaming gender dysphoria for  
13 why they feel unpopular or uncomfortable, and we're not --  
14 versus we can't tell if anxiety or depression is a result of  
12:56:27 15 how they're being treated by the rest of society.

16 So it's only by helping them deal with and by giving them  
17 the skills to overcome those other disorders that we can see if  
18 the gender dysphoria itself resolves just as a result of that.

19 Q So if a person is suffering from depression, or is  
12:56:48 20 struggling with their own sexual identity, or some type of  
21 abuse, or any of these other comorbidities, explain how this  
22 psychotherapy process would work, how a psychotherapist such as  
23 yourself would try to dig down into the issue and see if that  
24 is something that's generating these feelings that are being  
12:57:08 25 mistaken as gender dysphoria, or whether the gender dysphoria

1 is its own thing.

2 A Just to be specific, I'm specifically an adult clinical  
3 psychologist. I see clients ages 16 and up. So it wouldn't be  
4 me personally.

12:57:23 5 What the literature shows about these kids is that they  
6 can be very, very diverse. It certainly is feasible that they  
7 are experiencing, for example, depression or anxiety as a  
8 result of social transphobia, but that doesn't explain the  
9 other things that we're observing.

12:57:41 10 For example, a transphobia doesn't cause autism, which is  
11 another very, very common disorder in that group. Transphobia  
12 wouldn't cause the development of borderline personality  
13 disorder, which we're seeing in very, very, large proportions  
14 among the teenagers.

12:57:58 15 So although certain symptoms like anxiety and depression  
16 can feasibly be the result of social reactions to being trans,  
17 but that does not explain the overall phenomenon. What does  
18 better explain the overall phenomenon is that there is some  
19 thing troubling this kid, and it is resulting in both the  
12:58:20 20 psychological symptoms, depression, anxiety in someone, and  
21 also producing the gender dysphoria, that discomfort with being  
22 their natural sex.

23 Q I would expect this could vary wildly from patient to  
24 patient, but if you -- and I recognize and thank you for  
12:58:37 25 clarifying that you deal with a more adult-age group.

1 But if you're helping someone, an adolescent, work through  
2 some of these issues, how often do you think a psychotherapist  
3 would want to see the patient and over what period of time?

4 A It does vary widely. And the kind of disorders that  
12:58:57 5 they're reporting do tend to be the kinds that require very  
6 long-term interventions.

7 As I say, autism, and related Asperger's syndrome, and  
8 also very, very high rates of borderline personality disorders,  
9 which, again, is a very, very long-term disorder to help  
12:59:14 10 somebody deal with.

11 Q Fair to say this would not be two or three sessions?

12 A Correct. This would be over the course of months or  
13 years.

14 Q Does the research literature show that there are risks  
12:59:30 15 associated with medical transitioning?

16 A Yes, quite substantial, including both loss of --  
17 primarily loss of function, and depending on the person's point  
18 of view, whatever the cosmetic effects are.

19 Q What are the risks of the watchful waiting approach in  
12:59:48 20 providing psychotherapy in helping the child deal with any  
21 underlying emotional issues?

22 A There don't appear to be any, at least any concrete.

23 Q I will refer you to paragraph 68 of your report,  
24 Dr. Cantor.

13:00:06 25 Tell me what the advantages there are to a patient, what

1 opportunities it opens up to him or her if any emotional issues  
2 are dealt with before the decision to transition.

3 A If a person fails to deal with whatever emotional issues  
4 before it transition, and then transitions and discovers that  
13:00:30 5 they continue with whatever psychological issues are pervading  
6 them, they have gone through the entire transition process  
7 entirely unnecessarily. They haven't been helped. They have  
8 now lost whatever -- they have now been sterilized, lost  
9 whatever sexual -- or other functions, but it hasn't actually  
13:00:49 10 resulted in any improvement in their psychological function.

11 If you go the other way around and you help the person  
12 deal with psychologically whatever it is that's going on, they  
13 still retain the option for transition after that. And it's  
14 that situation that the professional societies have  
13:01:05 15 repeatedly -- that the standards of care have repeatedly  
16 pointed out.

17 Q So watchful waiting approach does not eliminate a person's  
18 ability to transition to the opposite sex later in life if they  
19 so choose?

13:01:19 20 A Correct.

21 Q Does the research literature show there's any relationship  
22 between children who present with gender dysphoria and those  
23 who later in life turn out to identify as gay?

24 A Yes. The large majority of the ones who believe that they  
13:01:42 25 were born the wrong sex turn out to be gay or lesbian.

1 To a prepubescent child who doesn't yet have a sex drive,  
2 they have no way to interpret why they feel different from  
3 other boys or other girls their age. It's only with the onset  
4 of sex drive that they start -- and start developing crushes  
13:01:58 5 and physical attractions that they now have the information  
6 they need to realize why they're different. But to an eight  
7 year old or to prepubescent children, the only explanation they  
8 have for why they're not like other boys or not like other  
9 girls is they must be the wrong sex. They're misinterpreting  
13:02:18 10 their feelings.

11 THE COURT: Let's take a quick time out.

12 So, you know, I guess I'm wondering how both sides are  
13 wanting me to use all this expert testimony. I mean, the  
14 Eleventh Circuit has said more than one time that, you know,  
13:02:31 15 medical psychiatric professionals are in a far better position  
16 to make decisions about medical and psychiatric issues than  
17 judges are.

18 So I guess I want to know from each side real quickly, how  
19 do y'all envision that I use these experts? I mean, are you  
13:02:48 20 asking me to say, well, this guy's science is junk and this  
21 guy's science is perfect; or something in between? What am  
22 I -- tell me how you envision me using this.

23 MR. LACOUR: May I?

24 THE COURT: Perfect. Absolutely.

13:03:05 25 MR. LACOUR: Your Honor, as we began the opening

1 statements, when there's an area of medical uncertainty, the  
2 State has wide discretion to regulate. So if it's not so clear  
3 to you as to which side's experts have it right, if you see  
4 that uncertainty, then under Supreme Court precedent, the State  
13:03:29 5 is allowed to regulate.

6 The State has to think about all 5 million Alabamians. We  
7 have to take all that into account when regulating in these  
8 areas where it is not certain.

9 The judge has an important but a limited role in our  
13:03:45 10 federal system to see whether those judgments the State has  
11 reached in those areas of uncertainty somehow conflict with the  
12 Constitution.

13 And we submit we have come forward with evidence to at  
14 least put into question whether there is this consensus that  
13:04:03 15 has been proclaimed by the plaintiffs here.

16 Again, I think the bar on the plaintiffs is quite high, to  
17 show an absence of uncertainty, or to show some great  
18 certainty.

19 And when you look at the international studies and the  
13:04:19 20 literature reviews, when you hear from very qualified experts  
21 like Dr. Cantor, who have applied great rigor to these studies  
22 that are being relied upon by the plaintiffs, by their experts,  
23 by the AAP, for example, then I think that is enough to create  
24 that doubt to create that space for uncertainty. And when that  
13:04:45 25 is there, the State can step in.

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1 So that's how we see it. We don't think that you sit here  
2 as an independent medical board to assess whether a particular  
3 treatment is going to be the best for any particular  
4 individual. The role of the federal courts in our federal  
13:05:01 5 system, the laboratories of democracy is to see if we have done  
6 something that is somewhat inexplicable.

7 I think there is ample evidence to explain why the State  
8 has done what it's done in addition to the lengthy legislative  
9 findings in SB 184.

13:05:22 10 We have come forward with multiple experts from fields of  
11 endocrinology, psychology, and pediatrics, and have brought  
12 forward substantial amount of other peer-reviewed research and  
13 literature reviews to show that this very novel area of the  
14 law -- keep in mind the UAB clinic didn't open until  
13:05:44 15 seven years ago. This is a novel area of medicine, rather --  
16 is just, in the State's judgment, too risky. And if that's a  
17 reasonable judgment for the State to make, then that's the end  
18 of the case.

19 THE COURT: All right. Mr. Doss.

13:06:03 20 MR. DOSS: Your Honor, I'm unaware of a case that  
21 establishes that principle that's so long as there's  
22 uncertainty and a reasonable judgment, then that alone is  
23 sufficient for the State to violate constitutional protections.

24 The standard of review is what I think helps frame some of  
13:06:23 25 this testimony. So, for example, if strict scrutiny applies,

1 it is the State's burden to establish a compelling state  
2 interest. And that its infringement on the constitutional  
3 protection has been narrowly tailored.

4 And I guess to preview Your Honor for closing, that is a  
13:06:40 5 key focus that I plan to spend some time with in closing on why  
6 this testimony we've heard yesterday and today, number one,  
7 does not establish a compelling State interest. But number  
8 two, even if you assume that it does establish some interest by  
9 the State, the interest that the State has identified and the  
13:06:58 10 regulation that it has imposed are mismatched. It's not  
11 narrowly tailored for the very reasons offered by the State  
12 through its witnesses.

13 And based on the standard of review, it is not a reasoned  
14 judgment. That's not the test for when a constitutional  
13:07:13 15 violation has occurred. The test is whether there is  
16 satisfaction of this demanding standard for the law's  
17 viability.

18 And so as I mentioned in opening, I don't think that Your  
19 Honor's job for the purpose of this hearing is deciding  
13:07:31 20 ultimately maybe even who is right. It's to show that there is  
21 scientific -- there are standards of care that exist, there are  
22 approved approaches to dealing with these issues. These are  
23 real medical diagnoses. These are real medical treatments.

24 And though the State may disagree them, that's not enough  
13:07:50 25 to establish the violation of the constitutional rights, Your

1 Honor.

2 THE COURT: And on that note, at least from what I can  
3 tell from both sides, State and government, and original  
4 plaintiffs, am I correct to say that everybody agrees that  
13:08:07 5 these are real diagnoses? Or no?

6 MR. LACOUR: Your Honor, could you --

7 THE COURT: And I am going to say this one more time.  
8 I don't need head nods. It is out of hand. This is not  
9 entertainment. This is the real world and the law. So we're  
13:08:25 10 not in a movie theater. I don't need head nods. I don't need  
11 approval or disapproval. If you want to do that, take it  
12 outside.

13 Go ahead.

14 MR. LACOUR: Your Honor, I think -- Your Honor, we  
13:08:46 15 agree that gender dysphoria is a psychological diagnosis, but  
16 as we have shown in both our written evidence and through  
17 witness testimony from both defense witnesses and plaintiffs'  
18 witnesses, we don't know whose gender dysphoria is likely to  
19 persist. And that's very important.

13:09:07 20 Even Dr. Antommaria this morning said that if you -- the  
21 level of certainty you have --

22 THE COURT: You are giving me more detail than I want.  
23 I just need you to answer my question.

24 MR. LACOUR: Okay. Can I respond to something  
13:09:21 25 Mr. Doss said before?

1 THE COURT: Very quickly.

2 MR. LACOUR: He is unaware of the standard. We cited  
3 it multiple times in our P.I. response. It's Gonzales vs.  
4 Carhart, a 2007 decision from the Supreme Court where the  
13:09:32 5 federal government had regulated partial birth abortion. That  
6 was an area of medical uncertainty.

7 There were -- I will go back and I will look at the  
8 filings in that case, but I would be shocked if the AMA did not  
9 chime in, in favor of the plaintiffs who were challenging the  
13:09:46 10 ban on partial birth abortion there saying that it was a safe  
11 or necessary -- medically necessary treatment for some people.

12 It was enough that Congress found medical uncertainty  
13 there. And there were values, as well, in unborn life that  
14 Congress was able to promote even though there were medical  
13:10:04 15 organizations.

16 I will confirm this before closing, but I am fairly  
17 certain there were medical organizations who were not fans of  
18 Congress's action there.

19 Even so, and even in an area like abortion where there is  
13:10:16 20 more law at least for the last 49 years in that space,  
21 addressing some right to abortion, even then, that ban was  
22 upheld by the Supreme Court.

23 THE COURT: And I'm sure you can get into that on  
24 closing.

13:10:31 25 Let's go back to my original question. Just answer it

1 succinctly for me.

2 MR. LACOUR: And that would be are these real  
3 diagnoses?

4 THE COURT: Yes. Just answer my question in two  
13:10:41 5 sentences.

6 MR. LACOUR: Gender dysphoria is a diagnosis. I think  
7 the debate is how should it be treated. And SB 184 is  
8 expressed in Section 6.

9 There's no ban on psychotherapy whatsoever. The ban only  
13:10:58 10 applies to these novel risky potentially long-term  
11 harm-inducing or causing medications.

12 THE COURT: So no argument from the State on status,  
13 diagnosis, any of that? You are only -- your only issue is  
14 treatment; is that correct?

13:11:17 15 MR. LACOUR: Correct, Your Honor.

16 THE COURT: Got it. Thank you.

17 Anything else, Mr. Doss? And I will give the government a  
18 shot --

19 MR. DOSS: No, Your Honor.

13:11:25 20 THE COURT: -- if they want to be heard.

21 MR. CHEEK: Nothing else to add that hasn't already  
22 been said, Your Honor. Thank you.

23 THE COURT: Okay. All right.

24 Mr. Davis, I have gotten right in the middle of your  
13:11:34 25 witness again. Sorry. Pick it back up.

1 MR. DAVIS: I certainly understand, Judge.

2 BY MR. DAVIS:

3 Q Okay. Dr. Cantor, we to try to pick up where we were.

4 Let's take two young boys, eight years old, say. So  
13:11:52 5 puberty hasn't started yet. They both have gender dysphoria,  
6 even though they may not really understand it yet.

7 And I know I'm asking you to assume some things that an  
8 outside observer may not be able to confirm just by looking at  
9 that child.

13:12:06 10 And let's assume that both those young boys would, if not  
11 intervened with transitioning care, would both grow up to  
12 identify as gay.

13 So the boy who is left alone to go through natural  
14 puberty, what does he come to understand once puberty kicks in?

13:12:24 15 A Once he -- as puberty kicks in, of course, sex drive comes  
16 in as a part of that, and he starts experiencing sexual  
17 attractions and sexual arousal.

18 That, then, because he is experiencing it towards other  
19 men, teachers, peers, whoever it is, he can now -- he now has  
13:12:41 20 the opportunity to understand the nature of his experiences and  
21 why he doesn't feel quite like other boys, why he doesn't feel  
22 as masculine, and why he doesn't feel as masculine.

23 Now, in otherwise healthy circumstances, he will grow up  
24 to be a healthy gay man.

13:12:57 25 Q Now, the other boy is given puberty blockers. What

1 happens in his case?

2 A Such a person who does not develop sexual -- the capacity  
3 for sexual arousal and sexual attractions because the very  
4 biological features which produce that have been held from him,  
13:13:14 5 he never experiences an orgasm. He never experiences sexual  
6 arousal, and doesn't have the opportunity to understand the  
7 other potential explanations for why he feels the way he does,  
8 and go from a child's understanding of why he doesn't feel like  
9 other boys, to an adult's understanding of why he doesn't feel  
13:13:36 10 like other boys.

11 By blocking puberty, you are blocking the very information  
12 that he needs to understand his own situation.

13 Q And you are not claiming to describe every person who is  
14 experiencing gender dysphoria, I take it?

13:13:49 15 A Correct.

16 Q Does the evidence show that sexual orientation changes  
17 after a person identifies as gay or lesbian?

18 A No. There is no evidence to suggest that sexual  
19 orientation is unstable or changes.

13:14:05 20 Q What does the evidence show about whether a person's  
21 gender identity can change?

22 A That shows the very opposite. Among the children, it  
23 changes in the majority of them.

24 They're even people who identify and describe themselves,  
13:14:19 25 for example, as being fluid, the very definition of which is

1 that their gender identity changes on a constant basis.

2 Q Are you familiar with the argument that if we do not allow  
3 minors to transition medically, the result will be increased  
4 suicides within these group of young people?

13:14:38 5 A I've heard that said, yes.

6 Q Does the research literature support the argument that  
7 denying these treatments will lead to an increase in  
8 suicidality?

9 A No, it does not.

13:14:50 10 Q Are you familiar with what other countries are doing, with  
11 respect to treatment of gender dysphoria?

12 A Yes, I am.

13 Q Are there any changes going on in recent years?

14 A Very much. In fact, things -- it's almost as if the  
13:15:10 15 pendulum has reached its far point, and it's now coming back to  
16 a much more moderate evidence-based tone.

17 There was really -- sparking off of the social media age  
18 more than anything else, we're able to identify a greatly,  
19 greatly accelerated, great and greatly expanded number and type  
13:15:31 20 of person who was potentially going to go through transition  
21 entirely, unlike the groups which we had previously studied.

22 Several countries, especially in Europe, permitted them  
23 with lower and lower standards. And then once the reports  
24 started coming out that that was failing greatly, they're now  
13:15:53 25 restricting very, very quickly and very, very greatly.

1 The two most substantial bans have been in Sweden and in  
2 Finland. And there are also now very, very strong statements  
3 urging the medical field to pull things back in the UK and in  
4 France.

13:16:08 5 Q Dr. Ladinsky testified yesterday that -- I don't have her  
6 exact words in front of me -- but she said that what's going on  
7 in the UK and Sweden and Finland isn't as relevant here because  
8 those countries have a centralized health-care system, whereas  
9 we have a less centralized health-care system, and all these  
13:16:35 10 experts unrelated can see the same child.

11 That's a poor paraphrase. The record will speak for  
12 itself. But assume she made that type of testimony. Would you  
13 agree with her?

14 A No. I can't see the logic of it. It's certainly  
13:16:53 15 feasible, in fact, more than likely that decisions are made  
16 differently when there are centralized boards and a centralized  
17 authority charged specifically with reviewing the evidence that  
18 will be the basis of the medical procedures of that country,  
19 and the U.S. lacks that.

13:17:11 20 But there's no reason to think that that situation would  
21 change the actual outcomes of the actual children getting the  
22 actual interventions.

23 Q So is it possible, then, that a more centralized  
24 health-care system may provide the ability -- an even greater  
13:17:24 25 ability to study and evaluate the risks and benefits of

1 gender-affirming care?

2 A That's demonstrably true. That is exactly the process  
3 they have gone through. They have published the results of  
4 exactly their reviews, and that is how their health-care  
13:17:40 5 systems -- that is what their health-care systems are  
6 responding to.

7 The American professional associations have not gone  
8 through such a comprehensive process. They're merely coming up  
9 with policies and citing only individual pieces of studies that  
13:17:54 10 appear to support it, rather than a comprehensive review.

11 Q I want to close a loop on adolescent onset gender  
12 dysphoria. We talked about ways different groups are  
13 different.

14 What's unique about this group of adolescent onset, or you  
13:18:11 15 referred to it also as rapid onset gender dysphoria?

16 A Yeah. It's been called both.

17 Where both the childhood onset and the adult onset are  
18 primarily male, the adolescent -- the adult onset and childhood  
19 onset are primarily male. The adolescent onset is primarily is  
13:18:28 20 female. They present with a different set -- it's a different  
21 epidemiological set of characteristics, and the evidence that  
22 we have about both adults and children don't seem to apply to  
23 that middle group.

24 Q Does this group of people presenting with gender dysphoria  
13:18:45 25 in their adolescence -- you said primarily female?

1 A Yes.

2 Q Do they tend to have any issues or comorbidities in common  
3 with each other?

4 A The most common one of those would be borderline  
13:18:57 5 personality disorders and other difficulties with integrating  
6 socially into their environments. As I say, such as autism and  
7 Asperger's syndrome.

8 Q You are not saying that's true for everyone presenting  
9 with gender dysphoria for the first time in their adolescence?

13:19:13 10 A Correct.

11 Q But many?

12 A Correct.

13 Q What does the research literature show about the  
14 desistance or detransition rates of people who transition after  
13:19:25 15 first presenting with gender dysphoria in their adolescence?

16 A There has never been any such study.

17 Q Did you review the plaintiffs' reply brief, Dr. Cantor?

18 A Yes, I did.

19 Q Did you see any response to your report in plaintiffs'  
13:19:41 20 reply?

21 A Not a single comment. My name was never mentioned. None  
22 of the studies that I cited were referred to. None of the  
23 arguments were addressed. I don't believe I was quoted  
24 anywhere in it, unlike the other experts.

13:19:56 25 Q I did note a line that the plaintiffs criticized the

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1 defendants' experts in general for relying on older studies.

2 A Yes. I saw that claim. I was a bit confused by it.

3 In my report, I provided a comprehensive list of every  
4 single study. There were 11 in total. So the old studies were  
13:20:18 5 listed, the new studies were listed. It was comprehensive.

6 It was also a tangential argument. As I said, the 11  
7 studies which have been conducted were unanimous in their  
8 findings. They all found the same thing. The majority  
9 desists.

13:20:33 10 So it doesn't matter even if one did rely only on the  
11 older studies, the newer studies showed exactly the same thing  
12 as the older studies.

13 Q We spoke a little bit about some of the things we heard  
14 from Dr. Antommaria this morning. I want to turn to some of  
13:20:55 15 the things in his report.

16 You reviewed his written expert report, did you not?

17 A Yes, I did.

18 Q He -- Dr. Antommaria wrote on -- in paragraph 17 of his  
19 report -- and I will find a copy if you need it, but this is  
13:21:07 20 one sentence.

21 Quote, gender-affirming medical care is supported by  
22 clinical studies. Is he right?

23 A That's true for adults, but that's not true for the other  
24 groups.

13:21:21 25 Q And Dr. Antommaria spoke about how if a drug is FDA

1 approved in one area, it's okay to use it off label in another  
2 area?

3 A That's what he said, yes.

4 Q What does the research literature say, or what opinion do  
13:21:44 5 you have about using the same drug, a puberty-blocker in the  
6 case of a person who's six, seven, eight, the purpose is to --  
7 precocious puberty, what about the cases of precocious puberty  
8 and using puberty-blockers to help someone medically transition  
9 at the beginning of normal puberty?

13:22:03 10 A Well, the ability to use a medication off label is not a  
11 blanket permission to give any drug you want for any reasons  
12 you want or for any conditions you want.

13 Ultimately, it's going to depend on what the scientific  
14 literature itself says, which in turn is what the various  
13:22:22 15 regulatory bodies use to make their decisions to decide what's  
16 off label or on label to begin with.

17 So because a medication would be useful for some people in  
18 some situations and some circumstances, does not mean it's  
19 automatically going to be useful for other people in other  
13:22:37 20 circumstances. Indeed it could be deleterious.

21 If you use a puberty-blocker in somebody with precocious  
22 puberty, you are pushing somebody who is far below the average  
23 age of puberty, and you are bringing them closer to the  
24 species-typical range of puberty.

13:22:55 25 If you give that same drug to somebody who is already

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1 having a typical age of puberty, you are now pushing them  
2 outside of the species-typical age.

3 Q Thank you, Dr. Cantor.

4 I am going to sum up. Does the research literature  
13:23:21 5 support plaintiffs' claims that we need to treat children and  
6 adolescents with gender dysphoria with social transition  
7 puberty-blockers and cross-sex hormones?

8 A I'm sorry. Could you say that -- I missed the first half  
9 of that sentence.

13:23:33 10 Q My apologies.

11 Does the research literature support plaintiffs' claims  
12 that we need to treat children and adolescents with gender  
13 dysphoria with social transition, puberty-blockers, and  
14 cross-sex hormones?

13:23:46 15 A No. That's terrible overstatement.

16 Q Does the research literature support Alabama's description  
17 of these treatments as experimental?

18 A Yes. They're fairly called experimental.

19 Q When does a drug or a course of treatment stop being  
13:24:02 20 experimental?

21 A That's an excellent question. There is no real test for  
22 it. There is no objective way to decide something is one  
23 versus the other.

24 Science is never finished. It's always possible for there  
13:24:14 25 always to be some future piece of information that changes what

1 we know.

2 There are, of course, you know, different situations --  
3 drugs, issues under active investigation, where it's very clear  
4 that it's still experimental, and others where, you know, there  
13:24:32 5 is only very little question left.

6 For this particular situation, we have a very small number  
7 of studies that in certain situations might look like they  
8 might be helping, but a much larger body of better performed  
9 studies showing that the improvement is not actually coming  
13:24:47 10 from the transition itself.

11 Indeed, there were other areas of the report that were  
12 referred to already ongoing studies testing exactly these  
13 interventions. Well, that there exists ongoing tests of these  
14 interventions is pretty much the definition of calling  
13:25:05 15 something experimental.

16 Q If scientists are eventually able to replicate the same  
17 results under the same conditions over and over again, can you  
18 then pretty much say something is established?

19 A Yes.

13:25:17 20 Q Has anybody been able to replicate the results of, say,  
21 the Dutch study that showed at least some positive results with  
22 a combination of treatments?

23 A No. Most of the studies have demonstrated no improvement  
24 in these children from medical transition.

13:25:32 25 Q Do you understand plaintiffs to argue that Alabama is out

1 of step with groups like the American Academy of Pediatrics?

2 A Yes, I've heard them say that.

3 Q What's your response?

4 A Well, it's actually the American Academy of Pediatrics  
13:25:54 5 which is out of step with the international standards.

6 Q Is there a consensus, a medical consensus internationally  
7 in support of these treatments?

8 A There is now a very quickly developing one. It is still  
9 ongoing debate, so I would hesitate to describe it -- describe  
13:26:12 10 that there is a solid consensus.

11 As I say, really what we have seen is a pendulum swing  
12 which is overswung and now is substantially and very quickly  
13 correcting itself.

14 Q Is the pendulum swinging in favor of medical transition  
13:26:27 15 use of puberty-blockers and cross-sex hormones for children and  
16 adolescents?

17 A No. It's swinging now against that.

18 Q Is there a medical consensus in the United States for the  
19 best way to treat gender dysphoria?

13:26:39 20 A No, there is not.

21 MR. DAVIS: Thank you, Dr. Cantor.

22 THE COURT: So I do have a question myself.

23 Dr. Cantor, you said that an adult should be affirmed in  
24 their transgender status.

13:26:58 25 THE WITNESS: An otherwise mentally healthy adult,

1 yes.

2 THE COURT: All right. So make it clear to me, then,  
3 when should an adolescent or a child be affirmed in that  
4 status?

13:27:10 5 THE WITNESS: That, to me, is an empirical question.

6 We are not sure actually when the best time do that is.  
7 Every time we check, we keep finding that, no, that's not  
8 exactly the right way. No, that's not exactly quite working.

9 And when we do think we have run into a clue that gives us  
13:27:26 10 an idea of when, we are not able to recreate that situation.

11 THE COURT: Is that case by case, then?

12 THE WITNESS: I would hesitate to say case by case  
13 exactly because --

14 THE COURT: Let me rephrase it. Under what  
13:27:44 15 circumstances would you affirm a child or an adolescent?

16 THE WITNESS: I can't say that there's a situation --  
17 all of the situations will be gray. I can't think of any  
18 evidence that would give us the kind of certainty in any case  
19 that would outweigh the potential risks.

13:28:19 20 THE COURT: So you would never affirm a child or an  
21 adolescent?

22 THE WITNESS: Not with the current evidence available,  
23 no.

24 THE COURT: Okay. All right. Cross?

13:28:28 25 CROSS-EXAMINATION

1 BY MS. EAGAN:

2 Q Good afternoon, Dr. Cantor.

3 A Good afternoon.

4 Q Dr. Cantor, you are an adult clinical psychologist,  
13:29:15 5 correct?

6 A Yes.

7 Q You are not a medical doctor?

8 A Correct.

9 Q Your private practice -- in your private practice in  
13:29:22 10 Toronto, the average age of your patients is 30 to 35 years  
11 old?

12 A Average, that would be about right, yes.

13 Q You've not ever provided clinical care to transgender  
14 prepubertal children?

13:29:39 15 A Correct.

16 Q You have not provided care to a transgender adolescent  
17 under the age of 16?

18 A Correct.

19 Q The extent of your experience, Dr. Cantor, working with  
13:29:52 20 transgender adolescents consists of counseling six to eight  
21 transgender patients between the ages of 16 and 18; isn't that  
22 correct?

23 A Yes.

24 Q So your clinical experience with gender dysphoria really  
13:30:09 25 lies in the counseling of adult patients?

1 A Correct.

2 Q And you acknowledge that gender dysphoria in children does  
3 not represent the same phenomenon as adult gender dysphoria,  
4 correct?

13:30:24 5 A Correct.

6 Q And, in fact, to use your words, they differ in every  
7 known regard, from sexual interest patterns to responses to  
8 treatments?

9 A Correct.

13:30:36 10 Q Dr. Cantor, you have never diagnosed a child or an  
11 adolescent with gender dysphoria?

12 A Correct.

13 Q Never treated a child or an adolescent for gender  
14 dysphoria?

13:30:48 15 A Correct.

16 Q You have no experience personally with monitoring patients  
17 who are undergoing puberty-blocking treatment?

18 A Correct.

19 Q You don't know what type of monitoring is typically done  
13:31:04 20 or not done on those types of patients; isn't that fair?

21 A No.

22 Q No, that's not fair?

23 A Well, you -- I personally didn't do it, but I am aware of  
24 the procedures that are done.

13:31:15 25 Q Okay. But you have no experience with that?

1 A That's correct.

2 Q Similarly, you have never monitored -- or you have not  
3 monitored an adolescent or teenage patient on hormone therapy?

4 A Correct. Until -- well, I wouldn't be monitoring the  
13:31:34 5 status in any case, so, yes, that's correct.

6 Q I am going to switch to UAB Children's, the gender clinic  
7 here in Alabama.

8 Have you ever spoken to a child or adolescent who was  
9 treated at the gender clinic here in Alabama?

13:32:00 10 A No.

11 Q Have you ever spoken to any former patients of the clinic?

12 A No.

13 Q You weren't here yesterday to hear Dr. Ladinsky talk about  
14 the treatment protocols they have at children's UAB, were you?

13:32:12 15 A Correct.

16 Q You weren't here to listen to the results of treatments  
17 provided to adolescent patients at UAB's Children's in the  
18 gender clinic; fair?

19 A Yes. They have never published them.

13:32:27 20 Q And you weren't here to hear them?

21 A Correct.

22 Q Dr. Cantor, you have no personal knowledge of the  
23 assessment or the treatment methodologies that are used here in  
24 Alabama at UAB Children's Hospital, correct?

13:32:42 25 A Correct. Correct.

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1 Q You do not know the disciplines of the medical providers  
2 who are part of the treatment team involved in that assessment  
3 at UAB Hospital?

4 A Correct.

13:32:56 5 Q Now, I heard your opinion that it's important to assess  
6 the mental health issues of an adolescent patient to see  
7 whether that is a potentially contributing factor to gender  
8 dysphoria and whether there's a need to address. That's a fair  
9 statement of your opinion?

13:33:17 10 A I'm sorry. Would you repeat that, please?

11 Q Sure. It's your belief that mental health issues need to  
12 be assessed and addressed before a transition occurs?

13 A Correct.

14 Q Do you know what assessment protocols at UAB Children's  
13:33:31 15 are to address mental health issues before a child is put on  
16 any transitioning medication?

17 A No, I do not.

18 Q Do you have any idea or do you know what the doctors at  
19 UAB Children's discuss with their adolescent patients about the  
13:33:48 20 risks and the benefits of medical treatments at UAB?

21 A No.

22 Q Wouldn't you agree -- well, never mind. I am going to  
23 move on.

24 Dr. Cantor, I want to talk with you a minute about -- or a  
13:34:18 25 little bit about your criticisms of the various studies

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1 regarding the efficacy of puberty blockers and hormone  
2 treatments, okay?

3 A Yep.

4 Q As I understand your report and your testimony today, one  
13:34:36 5 of the criticisms you have of some of those studies is that it  
6 relies on participant's self-assessment I believe is the  
7 language that you used.

8 Essentially, it is based upon what socially transitioned  
9 youth and their family is reporting about their mental health  
13:34:53 10 in these studies?

11 A I would say that's incomplete. My criticisms would be  
12 relying on such subjective accounts entirely for all the  
13 decision making rather than using it as one part of the  
14 decision making.

13:35:08 15 Q In other words, basing your study based upon what the  
16 participants in the study tell you how they're feeling at  
17 different points in the study?

18 A Being limited to that is a problem, yes.

19 Q And I believe the way that you phrased it, you said,  
13:35:22 20 subjective self-reports about how one is doing may not be  
21 reflecting reality objectively.

22 A Correct.

23 Q But, Dr. Cantor, self-reports about how one is doing may  
24 reflect reality, fair?

13:35:38 25 A That's correct.

1 Q So when somebody says, I am doing well, my mental state is  
2 better, that very well may be the case?

3 A May be the case, yes.

4 Q Another complaint that you have, I believe, is what you  
13:35:58 5 call confounded data. And I believe you referred to the de  
6 Vries study for that?

7 A The two de Vries's studies, yes. As a matter of fact,  
8 it's all but two of all papers in that set of literature.

9 Q And by confounded data, the way that I am understanding  
13:36:13 10 it, what you're saying is that you are not able to tell because  
11 the data is, quote, confounded, whether one's improved mental  
12 health for a minor who has socially transitioned, whether that  
13 came from the actual medical services, whether it came from the  
14 psychotherapy, or whether it came from the combination of both?

13:36:34 15 A Correct.

16 Q But one thing, Doctor, that you do have to admit is when  
17 adolescents with gender dysphoria have transitioned through a  
18 combination of medical services and psychotherapy, you have to  
19 admit that based upon the studies, their mental health  
13:36:55 20 improved, correct?

21 A No. There were several studies that showed no improvement  
22 even though -- even though they were receiving both. I've  
23 listed them in my report.

24 Q Can you direct me to where in your report those are,  
13:37:11 25 please, sir?

1 A Sure.

2 THE COURT: While he is looking, did you say your  
3 target is an hour; is that right?

4 MS. EAGAN: Yes, sir. I believe I should be able to  
13:37:33 5 be done in an hour.

6 THE WITNESS: Page 20, footnote 40.

7 BY MS. EAGAN:

8 Q I'm sorry, sir?

9 A Page 20, footnote 40. The Carmichael study, the  
13:37:48 10 Hisle-Gorman, et al, study, and Kaltiala.

11 My full sentence was, New studies continue to appear at an  
12 accelerating rate, repeatedly reporting deteriorations or lacks  
13 of improvement in mental health, footnote 40 -- or again, those  
14 were the specific studies -- and then or lack of improvement  
13:38:23 15 beyond psychotherapy alone, footnote 41.

16 Q Certainly, Dr. Cantor, though, there are many study -- or  
17 there are studies that indicate when adolescents with the  
18 combination of medical service and psychotherapy transition,  
19 their mental health has improved. You agree with that  
13:38:40 20 statement?

21 A I would have to check to see if the number is zero or a  
22 handful. There have been reports of there having been such  
23 improvement, such as the Branstom study, which once it was  
24 reanalyzed, discovered to have problems, and the finding was  
13:39:00 25 withdrawn.

1           So there -- again, I would have to go through and check to  
2 be sure that it's not zero. It would be fair to say that there  
3 might have been a study which found such a thing. But the  
4 majority of studies are finding either no improvements or  
13:39:17 5 deteriorations, or it's a situation that we call a failure to  
6 replicate.

7       Q     Sir, I am a little bit confused, because I want to go to  
8 two of your studies that you have actually talked about today,  
9 the Costa study and the Achille study.

13:39:33 10           Now, as I understand your testimony today, in those  
11 studies, there was -- the studies reported that there was an  
12 improvement in mental state for adolescents who were treated  
13 with medication and psychological treatment in transition that  
14 there was an improvement, but in those, you said you can't tell  
13:39:58 15 whether it's from the medication or from the psychological  
16 treatment?

17       A     No. The Costa study and the Achille study associated the  
18 improvement specifically with the psychotherapy and ruled out  
19 that the effects were due to the medical interventions.

13:40:13 20       Q     Okay. Well, let's pull those studies, Doctor, and let's  
21 look at those.

22           If you could, there should be a notebook up there that has  
23 plaintiffs' exhibits in it. Is that one plaintiff, sir?

24           If you could please, sir, turn to Plaintiffs' Exhibit 34.

13:40:55 25       A     Yes.

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1 Q All right. Plaintiffs' Exhibit 34, is this the -- do you  
2 say Costa or Costa?

3 A I'm sorry?

4 Q Do you say Costa?

13:41:05 5 A My guess is Costa. I have never met the person.

6 Q All right. Exhibit 34 that you have in front of you, is  
7 that the Costa study?

8 A Yes, it is.

9 Q All right. So, Doctor, I first want to focus in on --  
13:41:18 10 well, let me ask this: This study was aimed at assessing  
11 gender dysphoric adolescents' global functioning after  
12 psychological support and after puberty suppression, correct?

13 A Yes.

14 Q Bear with me. I am going to take this out so I can put it  
13:41:42 15 up on the Elmo, sir.

16 All right, sir. I am going to direct your attention to  
17 results that I have highlighted on my copy. Okay? According  
18 to the abstract here, the results?

19 A Yes.

13:42:18 20 Q At baseline, gender dysphoric adolescents showed poor  
21 functioning with -- it defines the mean scores. So baseline  
22 means at the start of the study, correct?

23 A Usually it does. I would have to check that that's  
24 exactly how they used the term.

13:42:35 25 Q All right. We will get to the details of that in a

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1 minute.

2 Okay. Gender dysphoric adolescents' global functioning  
3 improved significantly after six months after psychological  
4 support. And then it goes on to say, Moreover, gender  
13:42:49 5 dysphoric adolescents receiving also puberty suppression had  
6 significantly better psychosocial functioning after 12 months  
7 of puberty suppression compared to when they had received only  
8 psychological support.

9 Did I read that right, sir?

13:43:07 10 A Yes.

11 Q Do you remember the methodology that was used for this  
12 study, sir?

13 A Roughly.

14 Q Pardon?

13:43:14 15 A Yes. Roughly.

16 Q Sorry. I meant to -- all right. And do you recall that  
17 the methodology was everybody started at baseline. For the  
18 first six months all of the adolescents received psychological  
19 counseling. And then for the next 12 months beyond that, one  
13:43:36 20 group received puberty blockers, and one group just continued  
21 to receive psychological counseling. Do you recall that?

22 A Yes.

23 Q All right. And then I am going to direct you, sir, to  
24 page 2211 of the -- if you look at the blue writing on the top,  
13:44:12 25 it's page 6 of 9.

1 A Yes.

2 Q All right. And I am going to direct you, sir, to on the  
3 CGAS on follow-up?

4 A Yes.

13:44:32 5 Q All right. And I am going to start at the second  
6 paragraph where it says delayed eligible. Do you see where I  
7 am talking about?

8 A Yes.

9 Q This is talking about there were three follow-ups, right,  
13:44:43 10 at 6 months, at 12 months, and at 18 months for this study; is  
11 that correct?

12 A That sounds familiar to me, yes.

13 Q And let's read through that together.

14 Delayed eligible gender dysphoric adolescents, who  
13:44:55 15 received only -- and gender delayed, GD adolescents, is your  
16 recollection that those were adolescents who were eligible to  
17 receive puberty blockers, but they delayed them for six months  
18 so that they had everybody at a -- doing psychological study?  
19 Do you remember this is the group that gets the puberty  
13:45:17 20 blockers?

21 A Yes, that sounds correct.

22 Q Okay. The delayed eligible gender dysphoric adolescents  
23 who received only psychological support for the entire duration  
24 of the study -- excuse me -- I take that back.

13:45:29 25 This was actually the group that just got the

1 psychological -- had significantly better psychosocial  
2 functioning after six months of psychological support, okay?

3 However, despite scoring better at the following  
4 evaluations, they did not show any further significant  
13:45:47 5 improvement in their psychosocial functioning.

6 Did I read that right?

7 A Yes.

8 Q Also, the delayed eligible group continued to score lower  
9 than a sample of children adolescents without observed  
13:46:04 10 psychological psychiatric symptoms even after 18 months of  
11 being in psychological support.

12 So what that's saying is after 18 months, they were still  
13 below a group that did not have psychological therapy or  
14 issues, correct?

13:46:20 15 A Yes.

16 Q On the contrary, the immediately eligible group, who at  
17 baseline had a higher, but not significantly different  
18 psychosocial functioning than the delayed eligible group, did  
19 not show any significant improvement after six months of  
13:46:40 20 psychological support. However -- and this is the key --  
21 immediately eligible adolescents had a significantly higher  
22 psychosocial functioning after 12 months of puberty suppression  
23 compared to when they had received only psychological support.

24 Did I read that correctly?

13:47:03 25 A Yes.

1 Q Then you see at the top of this, there is a chart. And  
2 when you look at this chart, the bottom is actually the three  
3 different check-ins. Time zero is baseline, when the study  
4 started, right?

13:47:18 5 A Yes.

6 Q Time one is the six-month check-in, correct?

7 A Yes.

8 Q And during that six months, both groups are getting just  
9 psychotherapy, correct?

13:47:31 10 A Yes, I believe so.

11 Q The rest -- and just to orient us.

12 The red group, the red line is the group of adolescents  
13 who only got psychotherapy or psychotherapy through the entire  
14 18-month study, right?

13:47:46 15 A Yes.

16 Q The green line that you see that goes up -- goes up and  
17 keeps going up, that is the line of adolescents who receive  
18 puberty blockers; fair?

19 A Yes.

13:47:59 20 Q And so, Doctor, to get to the ultimate conclusion of this  
21 study that you say shows that puberty blockers don't work or  
22 don't give any improvement in mental condition over  
23 psychotherapy, the conclusion, this study confirms the  
24 effectiveness of puberty suppression for gender dysphoric  
13:48:37 25 adolescents. Recently, a long-term follow-up evaluation of

1 puberty suppression among gender dysphoric adolescents after  
2 that CSHT, which is hormone therapy and GRS, which is puberty  
3 blockers, has demonstrated that gender dysphoric adolescents  
4 are able to maintain a good functioning into their adult years.

13:49:00 5 This present study, together with this previous research,  
6 indicate that both psychological support and puberty  
7 suppression enable young gender dysphoric individuals to reach  
8 a psychosocial functioning comparable with their peers.

9 Did I read that conclusion correctly?

13:49:17 10 A Yes.

11 THE COURT: Ms. Eagan, when you reach a comfortable  
12 spot, let's take a post-lunch break.

13 MS. EAGAN: Perfect. We're good, Judge. We can go  
14 ahead and break now.

13:49:35 15 THE COURT: Okay. I will see you in 15 minutes.

16 (Recess.)

17 THE COURT: Go ahead, Ms. Eagan.

18 MS. EAGAN: Thank you, Your Honor.

19 BY MS. EAGAN:

14:09:00 20 Q Dr. Cantor, my understanding from paragraph 63 of your  
21 declaration is that the other study that you point to in  
22 support of your assertion that testing revealed that puberty  
23 blockers did not improve mental health any more than mental  
24 health does on its own is the Achille study you mentioned  
14:09:29 25 earlier today; is that right?

1 A Yes.

2 Q If you, please, sir, could turn to Plaintiffs' Exhibit 42  
3 in that binder in front of you, and this would be the  
4 plaintiffs' exhibits that we were looking at earlier.

14:09:42 5 A Yep. Got it.

6 Q All right. Is Plaintiffs' Exhibit 42 the Achille study  
7 that we just mentioned?

8 A Yes.

9 Q All right.

14:09:59 10 MS. EAGAN: Your Honor, do you mind if I take this off  
11 of this?

12 THE COURT: That's fine.

13 BY MS. EAGAN:

14 Q All right. I am going to -- so this is Plaintiffs'  
14:10:15 15 Exhibit 42.

16 And the Achille study, again, was -- in this case if we  
17 look at the abstract, the background of the study or the  
18 purpose of the study was to examine the associations of  
19 endocrine intervention puberty suppression and/or cross-sex  
14:10:35 20 hormones therapy with depression and quality of life scores  
21 over time in transgender youths.

22 That was the purpose of the study, correct?

23 A Yes.

24 Q And looking down to the results section, between 2013 and  
14:10:56 25 2018 -- so this went over a five-year period, right?

1 A Yes.

2 Q And there were 50 participants in the study, correct?

3 A That sounds right, yes.

4 Q All right. And that they received endocrine intervention

14:11:17 5 both -- some were in the form of puberty blockers, and some

6 were in the form of cross-sex hormones, but endocrine -- and

7 over that time period and completed three waves of

8 questionnaires.

9 Is that your recollection of this study?

14:11:30 10 A Yes, roughly.

11 Q Okay. And when that was -- with those treatments, mean

12 depression scores and suicidal ideation decreased over time,

13 which means their depression was -- went down, or they got

14 better. Suicidal ideation went down, which is improvement,

14:11:50 15 correct?

16 A Yes.

17 Q While mean quality of life scores improved over time.

18 And then it goes on to say, When controlling for

19 psychiatric medications and engagement in counseling,

14:12:03 20 regression analysis suggested improvement with endocrine

21 intervention. And then it goes on to say that this reached

22 significance in male to female participants. And the male to

23 female participants, those are ones that were receiving hormone

24 therapy, correct?

14:12:23 25 A I believe they were both receiving hormone therapy. It

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1 was not significant in one group, and so they're just reporting  
2 the successful in the other and not reporting the nonsuccessful  
3 group.

14:12:39 4 Q Well, let's talk about that. Let me pull up paragraph 63  
5 of your declaration.

6 When you're discussing this study, here is what you said.  
7 You said that upon follow-up, some incremental improvements  
8 were noted; however, after -- so, in other words, upon  
9 follow-up, they saw improvements.

14:13:07 10 But after statistically adjusting for psychiatric  
11 medication and engagement and counseling, quote, most  
12 predictors did not reach statistical significance.

13 And that's your basis -- that statement is your basis to  
14 say there was not a statistical significance of difference  
14:13:26 15 between just counseling versus with meds; is that right?

16 A I'm sorry. Could you say that part again?

17 Q The language that you seize onto, to say that puberty  
18 blockers did not improve mental health more than mental  
19 healthcare did on its own --

14:13:43 20 A Right.

21 Q -- was the statement in the study that most predictors did  
22 not reach statistical significance.

23 A Well, I wouldn't say that I derived that just from that  
24 sentence. It's just easier to convey that idea to readers by  
14:13:56 25 using the sentence. My evaluation of the study is by those

1 statistics directly.

2 Q All right. Let's go to the language in the study that  
3 they talk about, the regression analysis that you were just  
4 referencing there.

14:14:11 5 Okay. And this is here in the regression analysis.

6 Let me first say this: The mean changes over time. And  
7 it does say, Mean depression scores decreased. Quality of life  
8 improved, but did not reach statistical significance.

9 But then when you go on to the regression analysis, here  
14:14:39 10 is what it says. It says, Given our modest sample size --  
11 which in this case was 50 people, right?

12 A Yes.

13 Q Given our modest sample size, particularly when stratified  
14 by gender, most predictors did not reach statistical  
14:14:57 15 significance.

16 So one of the contributing factors to that, of course, was  
17 the size of the number of participants, correct?

18 A Yes. In statistics, that's a truism. The precision of  
19 the statistics is the direct -- direct result of the sample  
14:15:20 20 size.

21 Q Okay. And then it goes on to say, That being said, effect  
22 sizes values were notably large in many models. In the male to  
23 female participants, only puberty suppression reached a  
24 significance level. And it gives the number in one of the  
14:15:43 25 sample -- one of the tests, and associations with the two other

1 scores approached significance.

2 And then it goes on to say, For female to male  
3 participants, only cross-sex hormone therapy approached  
4 statistical significance.

14:15:57 5 All right. Statistical significance are not -- on all  
6 planes, the numbers improved, correct?

7 A No. That's -- the very meaning of determining --  
8 factoring in whether something is statistically significant or  
9 not.

14:16:15 10 Q Ultimately, the writers of this study stated, if you look  
11 at the next paragraph -- or look on the discussion part if you  
12 want -- can you see the screen up here?

13 A Oh, I have the same thing on this screen.

14 Q Oh. You have got one. Okay, good.

14:16:31 15 Our results suggest that endocrine intervention is  
16 associated with improved mental health among transgender youth.

17 Did I read that right?

18 A Yes. Those are their words.

19 Q Doctor, to be clear, you agree that the U.S.-based medical  
14:17:15 20 association guidelines and position statements are in support  
21 for the use of medical treatment combined with mental health  
22 treatment for adolescents with gender dysphoria, correct?

23 A I don't think I would phrase it quite that strongly. Most  
24 of the associations are using relatively vague terms. And it's  
14:17:35 25 not clear when they're talking about adults or children, when

1 they're talking about transition, medical services versus  
2 psychotherapy, or a relatively blanket statement of  
3 demonstrating respect. I can only accept that they're  
4 endorsing a particular treatment when they're endorsing a  
14:17:54 5 particular treatment.

6 So is there a specific association or specific statement  
7 you have in mind?

8 Q The major medical associations that were involved in this  
9 space endorse the use of medications to treat gender dysphoria  
14:18:08 10 in children -- excuse me -- gender dysphoric adolescents once  
11 they reach puberty when appropriate?

12 A I can think of two medical associations, one  
13 interdisciplinary association, and the other -- and all of the  
14 others are, as I say relatively, vague words of support, and  
14:18:44 15 it's not clear exactly what it is that they're recommending.

16 Q Well, my understanding is what you like to look at is the  
17 international standards. That's what you're talking about  
18 today in support of your opinions?

19 A Oh, I looked at each of them, and I think I described each  
14:18:59 20 of them. I did my best not to leave any out.

21 Q So, and according to you, the Dutch approach is  
22 internationally the most widely-respected and utilized method  
23 for the treatment of children who present with gender  
24 dysphoria?

14:19:13 25 A Yes.

1 Q And the Dutch approach is also, I believe, what you call  
2 that watchful waiting approach?

3 A No.

4 Q Okay. The Dutch approach is what is accepted -- I have  
14:19:24 5 already said what you said.

6 The Dutch approach says social transition can happen at  
7 age 12, puberty blockers may be prescribed at age 12, hormones  
8 at age 16, and then resolve other mental health issues before  
9 transition. That's the Dutch method?

14:19:43 10 A Yes.

11 Q Do you know how that approach aligns with protocols that  
12 are utilized at UAB Children's in Alabama?

13 A I don't know.

14 Q In any event, what you say is internationally the most  
14:20:03 15 widely-respected and utilized method for treatment of children  
16 who present with gender dysphoria, you would agree that that  
17 approach would be a felony in Alabama with this new law,  
18 correct?

19 A Yes. It's true that the Alabama law didn't leave an  
14:20:26 20 exception for research purposes.

21 Q Okay. So let's talk about the European countries that you  
22 mentioned very briefly, the UK, Finland, Sweden and France.

23 When you look at those four European countries, Doctor,  
24 not one of them has enacted a ban to puberty blockers and  
14:20:46 25 hormone treatments as Alabama has done here, correct?

1 A No.

2 Q That's not correct?

3 A Correct. That is not correct.

4 Q UK has not fully banned puberty blockers and hormone

14:21:00 5 treatments in youth 18 and younger?

6 A That's correct.

7 Q Finland has not banned -- let me ask it this way: Has

8 Finland banned blockers and hormone treatments in youth ages 18

9 and under for gender dysphoria?

14:21:16 10 A Yes, I believe it has.

11 Q It has?

12 A I believe so.

13 Q A blanket ban? Should I refer you to paragraph 131 of  
14 your declaration, sir?

14:21:47 15 A Hang on. That's just where I am now.

16 Q Okay.

17 A Oh, yes, they did leave an exception for hormones. The  
18 total ban was on surgery.

19 Q Thank you, sir.

14:22:05 20 Sweden, has Sweden put an absolute ban on puberty  
21 blockers?

22 A Yes.

23 Q And bear with me. Have they put a ban on puberty blockers  
24 and hormone treatments in youth ages 18 and under for gender  
14:22:23 25 dysphoria in Sweden?

1 A 18 and under?

2 Q Yes, sir.

3 A No. They allowed exceptions for 16 year olds -- 16 year  
4 olds within research circumstances.

14:22:32 5 Q Has France banned the use of puberty blockers and hormone  
6 treatments for adolescents ages 18 and under?

7 A No.

8 Q Can you point me to a single country, Doctor, in Europe  
9 that has put a blanket ban on the use of puberty blockers or  
14:22:50 10 hormone treatments for youth ages 18 and under for gender  
11 dysphoria?

12 A Blanket ban in the way you're describing it, no.

13 THE COURT: How about any country?

14 THE WITNESS: No, not that I know of.

14:23:04 15 BY MS. EAGAN:

16 Q I want to turn very briefly to the subject of -- I will  
17 use your word desistance.

18 If you turn to paragraph 36 of your declaration.

19 A Yes.

14:23:36 20 Q In that -- you state, Among prepubescent children who feel  
21 gender dysphoric, the majority cease to want to be the other  
22 gender over the course of puberty ranging from 61 to 80 percent  
23 desistance across the large prospective studies.

24 I know that's a point that you also raised earlier today.

14:23:59 25 So I want to ask this question: Of those that number, do

1 you know, Doctor, what percentage of those kids cease to want  
2 to be the other gender -- that's using your words -- before or  
3 as they enter puberty, in other words, before they actually get  
4 into puberty? Do you know how many of those desisters are in  
14:24:27 5 that window?

6 A I must not be understanding your question, because it  
7 makes me want to say the same number that's in the report, 61  
8 to 88 percent. What's different from what I said and what  
9 you're asking?

14:24:39 10 Q The 61 to 88 percent, is that children that realign with  
11 their birth sex before -- or as they're entering into puberty,  
12 that's that number?

13 A Yes.

14 Q Okay. All right. So I want to focus on a different  
14:25:01 15 category of youth. Let me ask you this: The medications in  
16 the United States, puberty blockers and hormone treatments  
17 cannot be given to kids for gender dysphoria until after  
18 they've actually entered into puberty, correct?

19 A Very many clinics are doing it as close to the beginning  
14:25:23 20 as soon as puberty starts as they are able.

21 Q But it's once they have entered puberty?

22 A Yes.

23 Q So let me ask you about that category of youth.

24 And that is adolescents who have entered into puberty,  
14:25:38 25 okay, and who have been -- have suffered from gender dysphoria

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1 persistently, consistently, and insistentlly in childhood  
2 leading up to puberty, okay?

3 A Okay.

4 Q Do you have any data regarding what percentage of those  
14:25:58 5 individuals desist after they enter into puberty?

6 A No. I don't think that level of follow-up has yet been  
7 conducted.

8 Q And, Doctor, in fact, it's your belief that the  
9 majority -- that while the majority of prepubescent kids cease  
14:26:35 10 to feel trans, you know, to puberty or during puberty, in other  
11 words, as they enter into puberty, the majority of kids who  
12 continue to feel trans after puberty rarely cease?

13 A That does seem to be the case, yes.

14 Q Okay. Doctor, are you being paid to be here to testify  
14:27:10 15 today?

16 A Yes.

17 Q What's your rate?

18 A 400 an hour.

19 Q Who is paying your fees?

14:27:14 20 A The Alabama state -- State of Alabama.

21 Q Okay. Dr. Cantor, have you attempted to recruit parents  
22 in Alabama whose children have gender dysphoria and were  
23 prescribed or referred to gender-affirmative treatments, have  
24 you tried to recruit them to give a witness statement in this  
14:27:38 25 case that they believe the treatments are harmful?

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1 A No.

2 Q Do you tweet?

3 A Yes.

4 MS. EAGAN: Your Honor, may I approach?

14:27:49 5 THE COURT: Yes.

6 BY MS. EAGAN:

7 Q Doctor, I've marked as Plaintiffs' Exhibit 45 a tweet  
8 Dr. James Cantor retweeted. And it's -- let me say this: Is  
9 this a tweet that you actually did?

14:28:40 10 A No. I --

11 Q You retweeted?

12 A Retweeted, exactly.

13 Q From a group called Genspect, or what's -- I don't tweet.  
14 Would you call that a group? I guess it's a group called  
14:28:56 15 Genspect?

16 A It's there is a group called Genspect, and this is their  
17 Twitter account.

18 Q All right. And then you retweeted it?

19 A Yes.

14:29:03 20 Q And it says, Urgent. Attention. Alabama parents, if your  
21 child experienced gender dysphoria and was prescribed or  
22 referred to gender-affirmative treatments and you believe these  
23 treatments are harmful, please direct message, e-mail us at  
24 once. We are looking for witness statements. Can be anon.

14:29:26 25 By anon, I guess that means anonymous, correct?

1 A That would be my reading, yes.

2 Q All right. Doctor, have you seen a sworn statement under  
3 penalty of perjury for any Alabama parent whose kid received  
4 puberty blockers or hormones and the parent said the

14:29:50 5 medications hurt their kid more than they helped them?

6 A I'm sorry. Did you ask have I seen such a statement?

7 Q Yes, sir.

8 A Not that I recall.

9 MS. EAGAN: Nothing further.

14:30:05 10 THE COURT: Any redirect?

11 MR. DAVIS: Short.

12 THE COURT: Ms. Eagan, did you intend to offer that  
13 into evidence or no?

14 MS. EAGAN: Oh, yes. Thank you, Judge. I offer  
14:30:37 15 Plaintiffs' Exhibit 45.

16 THE COURT: It will be admitted.

17 REDIRECT EXAMINATION

18 BY MR. DAVIS:

19 Q Dr. Cantor?

14:30:51 20 A Hi.

21 Q Is it true as a clinician you are not treating anyone who  
22 has presented with gender dysphoria as an adult or as a child?

23 A I treat adults with gender dysphoria, not children.

24 Q You are not treating them while they are adolescents or  
14:31:09 25 children, you are not currently treating someone who is like

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1 under age 16?

2 A Correct.

3 Q Okay. But you are familiar with the research literature  
4 on these issues, correct?

14:31:19 5 A Yes, quite.

6 Q And even those that are studying -- or children in  
7 adolescents?

8 A Of course.

9 Q You're knowledgeable about the treatment they're  
14:31:29 10 receiving?

11 A Yes, very.

12 Q And are you knowledgeable about what the research shows  
13 about the efficacy of these treatments?

14 A Yes.

14:31:35 15 Q You had an exchange with Ms. Eagan where you admitted that  
16 a fact that is self-reported by a participant may be true?

17 A Correct.

18 Q What's the rest of that sentence?

19 A It is certainly not necessarily true. We need something  
14:31:53 20 objective before we can make any decisions upon it.

21 Q Let's turn to the Costa study. That's at Tab 38 of the  
22 book of plaintiffs' exhibits.

23 MR. DAVIS: Your Honor, I'm sorry. I left a notebook.  
24 May I step over?

14:32:40 25 THE COURT: Certainly.

1 THE WITNESS: I'm sorry. You said Tab 38?

2 BY MR. DAVIS:

3 Q I was mistaken, Dr. Cantor. It was 34.

4 A 34 of the defendants'?

14:33:02 5 Q No. Of the plaintiffs' book.

6 A Yes. Now I'm back there.

7 Q Okay. Now, you have a line in your report in paragraph 57  
8 of your report that I will just read to you.

9 It says, Both groups improved in psychological functioning  
14:33:25 10 over the course of the study, but no statistically significant  
11 differences between the groups was detected at any point?

12 A Correct.

13 Q Okay. Are the three groups represented by the three  
14 colored lines -- the three groups you're talking about, the  
14:33:41 15 three groups on the three colored lines on this chart I'm  
16 showing you?

17 A Part of the information is contained in that graph, yes.

18 Q Okay. Does this table tell us more about the statistical  
19 significance or lack thereof shown in the Costa study?

14:34:02 20 A Yes, it does. The results of this table, although much  
21 harder to read, indicate that there was no statistical  
22 significance between the groups.

23 Q Okay.

24 A What was changing in the groups was change over time  
14:34:13 25 within the group relative to the same group previously. But

1 there were no changes -- no significant differences between the  
2 groups themselves.

3 Q Okay. What does it mean in a study if a finding lacks  
4 statistical significance?

14:34:29 5 A That there was a substantial probability of getting a  
6 pattern like that just by random chance.

7 Q And are there any reasons other than puberty suppression  
8 that the delayed group did not have the same change over time  
9 as the immediately eligible group?

14:34:45 10 A It's not exactly clear if they didn't change just as much.  
11 That's one of the ambiguities that, again, comes from  
12 statistics. When you look at it in different ways, you can see  
13 different aspects, different aspects of it.

14 Q And the authors actually noted statistical significance or  
14:35:11 15 lack thereof, did they not, in the language that are bracketed  
16 there? It says, this difference failed to reach significance  
17 possibly because of sample size?

18 A That is correct.

19 Q Have you said anything about the Costa study in your  
14:35:24 20 report that you need to withdraw after your exchange with  
21 Ms. Eagan?

22 A No. Everything I said is accurate.

23 Q Okay. Is the same true for everything that you have said  
24 about the Achille study?

14:35:39 25 A Yes. Everything I said was accurate. Nothing in the

1 prior discussion changed it.

2 Q The UK is still reviewing these treatments, are they not?

3 A They are in the middle of deciding what to do with what  
4 they have now discovered from their comprehensive review of the  
14:35:57 5 literature, which showed what they were doing was wrong.

6 Q What did they discover?

7 A They discovered that they said exactly what I said, that  
8 there is no evidence to support the medical transition of these  
9 children.

14:36:09 10 Q And they have not yet decided how to respond to that  
11 revelation, correct?

12 A Correct. They have now taken that report, and they're now  
13 reorganizing and deciding exactly what it is that they're going  
14 to do.

14:36:21 15 Q And in France, is it not correct that they've said about  
16 hormones that the greatest reserve is required for their use?

17 A That is correct.

18 Q And is it true that, quote, they have said that speaking  
19 of hormones, they're irreversible nature must be emphasized?

14:36:38 20 A That is correct.

21 Q And in Sweden, is anyone under 16 getting puberty blockers  
22 or hormone treatments?

23 A No. That is banned.

24 Q And what about over 16? Youth -- like --

14:36:51 25 A Between 16 and 18, they're permitted to do it, but only

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1 within recognized research programs. A regular physician  
2 can't.

3 Q And how many such research programs are going on at  
4 present?

14:37:04 5 A Oh, in Sweden?

6 Q Are you aware of any?

7 A I am aware of one lab that has two locations. I don't  
8 know what its current status is with its current research  
9 program.

14:37:20 10 Q Okay. Can you say whether a single child under 18 is  
11 currently receiving hormones for the purpose of transitioning  
12 in Sweden?

13 A I don't know.

14 MR. DAVIS: Thank you, Dr. Cantor.

14:37:39 15 THE COURT: Any recross?

16 MS. EAGAN: No, Your Honor.

17 THE COURT: May this witness be excused?

18 MR. DAVIS: Yes, of course, Your Honor.

19 THE COURT: All right. You can step down, sir.

14:37:48 20 THE WITNESS: Thank you.

21 THE COURT: All right. Call your next witness.

22 MR. DAVIS: Your Honor, the State calls Ms. Sydney  
23 Wright.

24 THE COURT: All right.

14:37:54 25 SYDNEY WRIGHT,



## Tweet



**James Cantor**

@JamesCantorPhD



The only ones who crave affirmation more than trans teens are their doctors.

8:02 AM · Feb 15, 2023 · **4,734** Views

**EXHIBIT 11**

Witness: James Cantor

Date: 6/7/23

Dana Miller, RPR, CRR